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COMMUNICATIONS.

THE HYPODERMIC SYRINGE.

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That there are still many physicians who, while in active practice, never have made use of the hypodermic syringe, is a fact which cannot be questioned. At the same time we must admit that there are good reasons for this apparent neglect in not employing one of our most efficient methods of administering medicine to the sick. There are many physicians who have never seen a subcutaneous injection performed, who have studied at a time when its application was unknown, but who may have read of the many fatal accidents which occasionally followed its employment; and such practitioners necessarily are afraid of employing means with the use of which they are not thoroughly familiar. We are convinced, however, that no physician who is thoroughly acquainted with hypodermic medication will ever fail to make use of the same, if opportunity offers itself, and we will endeavor in the following to impart the information most desirable, having all the time the wants of those practicing physicians in view who, by the force of circumstances, failed to obtain this useful knowledge. To this end we will first speak of the instrument itself, then of the manner in which the remedies to be injected should be dissolved, and of the medicines and the different solutions usually employed this way; afterward we will mention the parts of the body into which the injections should preferably be made; the precautions to be taken and the dangers to be avoided; and lastly, we shall name the diseases in which the hypodermic method is especially useful, and in which it is frequently our only available means of success.

Generally speaking those syringes which command the highest prices are the best. We prefer a metal case, a glass cylinder, and a graduated piston rod. But a physician may buy any hypodermic syringe which fulfills the following conditions. When water is drawn into the syringe or ejected from it, the operator must note that the piston does not give a sudden jerk; because, whenever such is the case, the cylinder has not all over the same width—a serious fault, making the syringe useless. Further, when the needle is attached and the fluid injected under the skin, not a drop of the solution should pass behind the piston-head; if it does, the latter must either be made tightly fitting or another syringe has to be procured. None of the fluid should pass out between the glass cylinder and the metal case. Then the physician must see that the rod is correctly graduated. Some syringes, when indicating, for instance, five minims, contain in reality seven or more; if the operator is not aware of this fact, dangerous results might ensue. It is necessary, therefore, that we should be well acquainted with the exact capacity of the syringe, and know how far this corresponds with the graduation on the rod. Lastly, the needle must be without a leak, very sharp, and at least one-inch in length. Any hypodermic syringe answering the description given, will fulfill its purpose.

Of all remedies, morphia is most frequently used by the hypodermic method. The dose of

this drug, when injected the first time under the skin of an adult, should be gr. ½. The best plan for the physician to adopt is to carry with him a number of powders, each containing morphiæ gr. ¼, and to dissolve one of them in about ten minims of lukewarm water immediately before use. Morphia might also be kept in solution, for which we will give in the following a recipe. All other remedies are better kept in solution.

Before enumerating the different solutions generally used by the hypodermic method, we wish to say the following: The dissolving fluid should be distilled water, and hot at the time of preparation. To each ounce one grain of crystallized carbolic acid should be added, and the solution then be filtered through filtering-paper into a bottle, the wide mouth of which can be tightly closed by a glass stopper. Exposure to air must be avoided, and when using such a solution, it should be clear and without sediment. The following solutions are those generally employed in the practice of medicine. To prevent repetition we omit the addition of the carbolic acid, one drop of which should, as mentioned, be added to each ounce of solution:

MORPHIA.

℞. Morphiæ, sulphat., gr. xvj
Aquæ destill., f℥ j. M.
Sig.—For hypod. use, ♏v–gr. ½.

ATROPIA.

℞. Atropiæ sulphat., gr. ss
Aquæ destill., f℥ v. M.
Sig.—Atrop. ♏vj–gr. $\frac{1}{100}$.

STRYCHNIA.

℞. Strychniæ sulphat., gr. j
Aquæ destill., f℥ ss. M.
Sig.—Strychnia ♏v–gr. $\frac{1}{40}$.

QUINIA. *

℞. Quiniæ sulphat., gr. xxj
Solut. acid. tartar. concentr. f℥ j M.
Sig.—♏xx–gr. vij.

PILOCARPIA. *

℞. Pilocarp. muriat., gr. iv
Acid. muriat., ♏j
Aquæ destill., f℥ ss. M.
Sig.—♏x–gr. ½.

Besides the foregoing the following medicinal substances are frequently administered by the hypodermic method. Ergot,† a special fluid extract, is manufactured for this purpose, the dose being about ♏vj; arsenious acid; Fowler's solution, in the dose of ♏iv and more, is the most convenient form for this acid; iodine, Lugoll's solution, in the dose of ♏v and more, is admirably adapted for the hypodermic administration of iodine; solutions of nitrate of silver, corrosive sublimate, and of caustic potash; further, chloroform, chloric ether, brandy, and aqua ammoniæ, are also frequently injected subcutaneously, for purposes later to be mentioned. There are still other drugs, as hyoscyamia, woorara, etc., employed in the same manner, but those enumerated above are so commonly made use of, that they should be kept on hand by every practicing physician.

Whenever a hypodermic injection shall be made the following conditions have to be observed: Being convinced that the instrument is in perfect order (see above), we either draw the exact amount of the solution to be used into the syringe, or, the better plan, we fill the syringe totally with the solution, and by moving the small screw down the piston rod to the number of minims wanted, prevent the possibility of a larger amount than intended escaping. We prefer the latter plan, as we can this way better get rid of all the air in the syringe, a very important matter. This is best done by holding the syringe with the needle upward, and then allowing all air to escape by pushing the piston up, until all the air is out and only the fluid escapes. By all means we must be certain that the syringe contains no air. We then select the locality for injection, and here we prefer the place as near as possible over the part to be acted upon. If there is no special part, but we wish to make a general impression, then the injection should be made in the upper arm, near the deltoid, or into the abdominal walls, or into the integument covering the inner and anterior side of the thigh. At these places the least pain is felt and absorption is more rapid. Next, we must be exceedingly careful not to push the needle into a vein, as in such a case the most alarming symptoms, and even death, may ensue. Having selected the place, a part of the skin is lifted up with two fingers and the needle thrust rapidly into the subcutaneous areolar tissue, and the solution injected. The needle is then withdrawn and a finger placed immediately over the opening in the skin, and held there, while the operator tries, by moderate pressure, to spread the injected fluid through the cellular tissue. If, either in consequence of a rusty needle or of air having been present in the fluid, or from some other cause, signs should later develop themselves denoting the formation of an abscess, we will mostly be able to prevent this, or limit it decidedly, by painting the part

* No carbolic acid.

† This preparation is apt to clog up the hypodermic needle, and the latter, as well as the syringe, must always be thoroughly cleansed with hot water when this fluid extract has been used.

three times daily with tincture of iodine, till all swelling and hardness have disappeared. Should, notwithstanding this precaution, an abscess form, only a very small opening should be made with a sharp-pointed bistoury. Experience has convinced us that this procedure is far better for the patient, and that the abscess heals with greater rapidity than when it is laid open with a long cut. But if the injection is carefully made, and the precautions mentioned are observed, the moderate and soft swelling following a hypodermic injection will generally disappear within forty eight hours.

We come now to an important question: In what diseases should hypodermic injections be administered? As mentioned before, we will not be able to give every indication, but we will take up the different solutions described, and try to illustrate by instances the indications for their employment.

Perhaps at 2 A.M. the bell rings and the physician is called to a patient, whom he finds in agonizing pain. It may be a case of gastralgia, of colic of any kind, or of any other severe pain. The first indication would always be to relieve the suffering of the patient, and the doctor should not leave the case until that end is gained. Nothing will act as rapidly as a hypodermic injection of morphia, repeated if necessary, should the first not have brought decided relief. In the majority of cases the physician will be able to return home within less than half an hour, the patient enjoying a quiet sleep. The further management of the case may be left for the visit the next morning.

In cases of delirium tremens our chief anchor is still opium, especially in cases where the weakened condition of the heart forbids the employment of chloral. The internal administration of opium is mostly for a long time unsuccessful, as the power of absorption by the vessels of the alimentary canal is, in such cases, on account of the affection of the mucous membranes, mostly below the normal. Here the subcutaneous injection of morphia will act like a charm, and will surprise, by its rapid effect, the physician who used to rely always on the internal administration of opium in these cases. A further indication for the employment of morphia by this method is found in all those cases in which we wish to administer this drug but cannot give it internally, on account of the existing nausea and vomiting. Peritonitis is one of these diseases. In fact, whenever we wish a rapid action of morphia, or when, the use of this drug being indicated, certain conditions of the patient prevent us from administering it successfully by the mouth, the hypodermic method should be employed.

The published record of several cases seems to show that in the hypodermic administration of morphia we possess as reliable an antidote in cases of poisoning by belladonna, as atropia, subcutaneously injected, has proven successful in poisoning by opium. Stubborn cases of myalgia, especially of lumbago, will often yield to combined hypodermic injections of morphiæ gr. $\frac{1}{6}$. and atropiæ gr. $\frac{1}{100}$. In cases of failure of the heart's action, especially when the capillaries of the surface of the body seem to be emptied of blood, the administration of atropia by the same method has given the happiest results.

Strychnia is perhaps our most reliable medicine for paralysis, after any inflammatory condition which might have caused the latter has passed away. The most effective way of employing this drug in such cases is by the hypodermic method; the remedy being injected subcutaneously over the parts affected. Especially in local palsies this method is by far the most effective.

While in common cases of malaria we will succeed in effecting a cure by the internal administration of quinine, or by administering it by the bowel, in many cases of the congestive type we will have to employ this remedy hypodermically, either because the time is too short, so that we could not prevent the next, perhaps fatal, paroxysm by the internal use of quinine, or because the irritable condition of the stomach excludes the latter method. Besides, we gain this way the same effect with a much smaller quantity of the drug —one-third of the internal dose only being required—an item which, under certain circumstances, is of no small importance.

There are few modern remedies which have met with such a success as jaborandi or its alkaloid, pilocarpia. Whenever we wish to produce a powerful diaphoresis, stimulate absorption and increase the flow of urine, and when, for reasons which must be apparent to every physician—as unconsciousness, coma, inability to swallow, or irritability of the stomach, conditions frequently met with in morbus Brightii—we cannot employ this remedy by the mouth, the hypodermic injection of pilocarpia is indicated, and has saved many a patient from a premature death.

Ergot has been employed successfully by the hypodermic method, in cases of enlargement of the spleen and of the thyroid gland. It is then injected over the hypertrophied organ. If we aim to produce contractions of the uterus within as short a time as possible, or to stop internal

capillary hemorrhages, the remedy should be used subcutaneously.

Arsenious acid, or the arsenite of potassium, in the form of Fowler's solution, has been successfully employed in the manner mentioned, in cases of chorea and other nervous diseases, especially when the irritability of the stomach prevents the internal administration of this powerful drug. Some cases of leukæmia, lymphadenoma, have been reported as cured by this method.

Lugoll's solution, injected subcutaneously, is known to stimulate absorption, and is employed mainly in cases of hypertrophy of the thyroid gland, of enlargement of the spleen, and to induce absorption in cystic formations.

The following remedies have been employed hypodermically for the purposes indicated: Solutions of nitrate of silver in cases of nævi or deep-seated neuralgic affections, as sciatica; suppuration follows, and the nævus disappears, and the neuralgia is often benefited by this procedure; solutions of corrosive sublimate, to effect a rapid cure in constitutional syphilis; here the injections are preferably made over the glutei muscles; chloroform has been injected subcutaneously in neuralgia; chloric ether, brandy, and aqua ammoniæ in cases of collapse, and a solution of caustic potash to destroy hair-growth, one drop of the solution being injected near each bulb. This is considered the most reliable and never failing procedure to effectually prevent any further growth of hair in that locality. As mentioned above, many other remedies have been used by the hypodermic method, but for these we must refer the reader to works on this subject.

The main points in favor of all hypodermic medication are the following: The rapid action of the remedy, which enters the circulation immediately, without having to undergo chemical alteration in the stomach; the fact that drugs can be introduced into the system when the irritability of the stomach would forbid their administration by the mouth; and lastly, the possibility of getting the full effect of a medicine in cases of inability to swallow or of unconsciousness.

But, in conclusion, we wish to draw the attention of our readers to one great danger in the employment of hypodermic injections of morphia. Most cases of morphia habit find their origin in the reckless employment of such injections by the attending physician. The latter should never discharge his patient, in cases where a frequent use of this remedy by the subcutaneous method was necessary, until he has convinced himself, by gradual withdrawal of the drug, that no habit has been established, and till the patient has not experienced any restlessness for several days, and enjoyed a quiet sleep for several nights, without the use of morphia. A physician who, in such cases, neglects this precaution, is morally, if not criminally, responsible, if the deplorable habit should become established. We may add, that the administration of bromide of sodium, in doses of thirty grains, three or four times daily, will greatly assist in making the gradual withdrawal of morphia in these cases less painful and easier for the patient, and that the fluid extract of Jamaica dogwood, in doses of twenty to forty drops and more, will assist in obtunding sensibility and procuring sleep. Whenever we are forced to continue, in any case, hypodermic injections of morphia for a longer time, we always engage, after the total withdrawal of the remedy, a reliable nurse for two days and two nights, to watch the patient, as the statements of the latter under such circumstances have to be taken *cum grano salis*. Besides, the contraction of the pupil, even in dim light, will generally tell the physician that his patient is still continuing the morphia.

507 *Franklin street.*

LACERATION OF THE FEMALE PERINEUM.

BY H. V. SWERINGEN, M.D.,

Of Fort Wayne, Indiana.

Read before the Indiana State Medical Society, May 11th, 1882.

My object in presenting for your consideration a few cases of lacerated perinei, is to hear, as an interested spectator, the subject discussed with especial reference to the much disputed point, the proper time for operative procedure. This being my purpose, it will not be necessary to enter into its etiology and prophylaxis.

I commenced the preparation of this report a week ago to-day, subject to the interruptions common to the physician. A mere glance at the literature of the subject was taken, and, therefore, Goodell and Thomas were but hastily consulted. But I am here to relate my own experience, and not that of the excellent authorities quoted, however difficult it may be to divest myself of that gregarious spirit which is disposed to follow the track pointed out by a few leaders.

Case 1.—In the spring of 1876 Mrs. H., a healthy, robust lady, residing on Virdlinger Avenue, Fort Wayne, Indiana, æt. 35 years, primipara, was delivered, by forceps, of a healthy child, which delivery resulted in a complete rupture of the perineum, which was immediately

sutured by three silver wires, after which union speedily took place by the first intention.

Case 2.—On the last day of October, 1880, Mrs. D., residing at No. 71 West Wayne street, Fort Wayne, Indiana, a rather delicate lady, æt. about 30 years, primipara, was delivered, by forceps, of a bright, healthy child, which delivery resulted in a partial laceration of the perineum; two black silk sutures were at once introduced and carbolized injections employed twice daily; union was not effected; septicæmia developed, and death occurred on the twelfth day of November.

Case 3.—On the 5th day of October, 1880, Mrs. E., a healthy, well developed lady, aged about 25 years, residing at No. 11 North Cass street, Fort Wayne, Indiana, primipara, was delivered, by forceps, of a healthy babe, resulting in the laceration of the perineum, to a point about midway between the fourchette and the sphincter; no sutures were employed, simply carbolized vaginal injections were resorted to, night and morning, and the patient directed to assume a lateral posture, without, however, fastening the knees together; union took placê rapidly, without suppuration.

Case 4.—On the 17th day of February, of the present year, 1882, Mrs. D., a healthy, vigorous lady, aged about 26 years, primipara, residing at No. 14 Wilt street, Fort Wayne, Indiana, was delivered, instrumentally, of a healthy child, with the result of a complete laceration of the perineum; the rupture was so extensive that for several days it was impossible for her to retain her fæces. No sutures were introduced, carbolized vaginal injections were employed night and morning, and the lateral decubitus rigidly enforced, without tying the knees together; union by the first intention was speedy and perfect.

Thomas, in his great work on the Diseases of Women, on page 129, makes use of the following language:—

"Even when the rupture has been complete, it has been asserted that spontaneous cure has taken place, but such reports need confirmation. Pen once affirmed that he had seen a woman thus injured, and who passed her fæces involuntarily, entirely recover. De la Motte declares that thirty years afterward he met and examined Pen's patient, in Normandy, and found that no recovery had occurred."

In view of the foregoing extract, I feel obliged to give in full the address of this case, which is as follows: Mrs. James M. Dickson, No. 14 Wilt street, Fort Wayne, Indiana; the address of the nurse who attended her is Mrs. John H. Waterman, 157 Van Buren street, Fort Wayne Indiana.

Case 5.—On the 27th day of last month, April, 1882, Mrs. M., a lady in ill health, residing on Walnut street, Fort Wayne, Indiana, was delivered, by forceps, of her second child. As a result of this delivery, the perineum was ruptured down to the sphincter; its examination revealed, also, an old, ununited, partial laceration, which occurred during her first accouchement, nearly two years prior, while residing in another town, and while under the care of another physician. She was now directed to lie constantly, on either side, with her knees tied together, and carbolized washes were ordered to be employed night and morning; no sutures were introduced. Up to the date of the present writing, May 6th, 1882—on which date her babe died in a spasm—nature has entirely failed to effect a union of the severed parts. She is now taking iron, quinine, cod-liver oil, etc. No history was obtained from her, save a general complaint, extending over a period of several years, of an indescribable illness. Her appearance is anæmic, leucocythæmic, or that of general debility, with all that that rather indefinite term implies, and she presents a diathesis not wholly unlike that denominated strumous. I believe that in this case, when her general health is sufficiently improved, union of the ruptured parts will take place by merely revivifying their surfaces and enforcing the lateral decubitus, without resorting to sutures; the latter would have been, in my opinion, unsuccessful in this case.

I have now recorded my own personal practical experience in lacerations of the female perineum. As will be observed, it is by no means extensive; but, diminutive as it is, it has not failed to be suggestive of the following propositions:—

1. If natural, unaided parturition, which we must regard as a healthy physiological function, is not unfrequently followed by pathological and necrological results, the immediate closure of a ruptured perineum by sutures tends to favor these results, by reason of the sources of infection their puncta create. The fact that in many instances these results do not follow the operative procedure does not in the least detract from the soundness of the position here taken.

2. An open, unsutured, non-uniting, but cleanly rupture is certainly not so likely to become infectious as a closed, sutured, ununiting and therefore uncleanly laceration, leaving out of the consideration the foci of infection produced by the sutures alone. Upon this point,

Dr. Goodell writes as follows: "The fears of septicæmia entertained by some physicians are purely hypothetical; for, although the suture-tracks form, in one sense, new foci of infection, yet they close up a raw surface whose area is vastly larger than theirs.

But there is a certain proportion of cases in which these raw surfaces, though sutured, do not unite, and in which, therefore, the suture-tracks increase largely the area of exposed absorbing surface, and hence increase, also, the risk of danger. It is in the interest of this certain proportion of cases that I write; for if it can be shown that death occasionally results from septicæmia, due to the immediate operation, and very seldom if ever from the remote, and that nature alone, if let alone, with favorable conditions, would be more frequently successful in effecting a cure, our rule of action is made plain. Parturition, under the most favorable circumstances is attended with great risk, and if we can well postpone an operation which would have the least tendency to increase this risk, it is our duty to do so.

3. If, then, it could be established beyond a reasonable doubt, that, all things being equal, in all cases of ruptured perinei in which art succeeds in effecting an immediate union nature would likewise prove successful, the immediate operation should never be attempted.

I feel deeply the importance of this subject, because I shall never be able to banish from my mind the impression that the case I lost died of septicæmia, directly traceable to the immediate operation.

Hospital Reports.

HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA.

CLINIC OF LOUIS A. DUHRING, M.D.,

Professor of Dermatology.

Reported by Fred. A. Taylor.

Case 1.—Eczema Rubrum, Infantile.

Our first patient is an infant about six months old, who has marked eczema rubrum of the face, showing also erythematous lesions of the same disease on the forearms and hands. It is much more marked on the face, which is the usual seat of the disease in infants. Here it is characterized by crusted patches, resulting from broken down vesicles and pustules. These patches which you see did not come out as such. The primary lesions were vesicles, papulo-vesicles or pustules: these became scratched, and broken down and dried; then new lesions appeared, which were again scratched down, and drying with the others, have ultimately resulted in these patches. This is the usual course in such cases, and hence, as the patient is not generally brought to us for a month or two after the disease has made its appearance, the original lesions are rarely seen. This case, however, exhibits on the backs of the forearms and hands an eruption of the papulo-vesicles, evidently of recent appearance, which are the typical, original lesions in this form of eczema. The case is typical of what you will frequently meet in practice, as this form of eczema is common in young infants.

The treatment is in some cases easy and in others not. It is hard to predict in any given case what its course will be. In the case before us the general health is good, and no internal treatment is indicated. A not very stimulating local treatment is needed. We will employ an ointment of boracic acid, a drachm to the ounce of vaseline, to be rubbed in three times a day; the parts to be previously washed with a lotion containing three drachms of boracic acid to the pint of water. We will continue this for a week, and if no benefit results, we will substitute an ointment composed of equal parts of tar ointment and vaseline.

Case 2.—Tubercular Syphiloderm of Nose.

The next case is that of a woman, about forty years of age, who has been under treatment two weeks for a tubercular syphiloderm. The lesions occupy both sides of the nose, extending somewhat upon the cheek. They are broken down and are in a state of involution; they are, however, still much swollen, indurated, of a reddish, violaceous hue, clearly outlined against the surrounding healthy tissue. You notice also, on the nose, two or three characteristic bluish cicatrices. The history of the case does not concern us, aside from the appearance of the secondary symptoms. She has had the skin disease, she says, six or eight months. It has improved markedly under the treatment we have given her. Internally she has had the following:—

℞. Potassii iodidi, ℥ij
Hydrargyri biniodidi, gr. iss
Tinct. cinch. comp., f℥iv. M.

Sig.—One teaspoonful, with water, after each meal.

Locally, we used, for the right side of the nose, an ointment composed of equal parts of vaseline and oleate of mercury, of thirty per cent. strength. On the left side we used ammoniated mercury, thirty grains to the ounce of vaseline. As you can see, the ammoniated mercury has proved the most valuable by far in this case. The treatment will be continued.

Case 3.—Vesicular Eczema of the Leg.

This man, about fifty years of age, shows a diseased condition of the lower part of the leg. Two or three months ago he received some injury in this region, which was followed in a few weeks by an eruption of vesicular eczema. The lesions have broken down and crusted, and tend to form patches, as in the case of the child whom you just saw. On further examination we find that the disease has appeared on the other leg and both arms. The symmetry is striking.

The patient is rheumatic, and is somewhat

constipated. His treatment, consequently, will be the administration of a saline aperient every morning before breakfast, so that his bowels will be moved once a day; liquor potassæ, in ten or fifteen minim doses, three times a day, after meals; and locally, the black wash, to be dabbed on three times a day, for ten minutes at a time, and the sediment allowed to dry; this to be followed by an application of oxide of zinc ointment. Under this treatment the disease should begin to disappear in a week or ten days.

Case 4.—Furunculosis of the Buttocks

A boy, about ten or twelve years old, and of delicate health, presents extensive disease of the buttocks, characterized by a number of boils, about a dozen in all, variously disposed over the surface; some running together and forming inflamed areas, in various states of evolution; some just making their appearance, others fully developed, and others passing away. The disease is known as furunculosis; in common language, boils.

Many different methods of treatment are advocated for boils, but there is no general rule that can be applied. The treatment must be adapted to each special case, taking into consideration the general health of the patient, the mode of appearance and the location of the disease, whether they have ever appeared before or not, etc. In this case the boy is anæmic, and gives us a distinct history of malaria; and we will prescribe five drops of the tincture of the chloride of iron, to be taken three times a day, after meals, and five grains of quina, to be taken in one dose, every night. This, I believe, will speedily effect a cure.

Case 5.—Chronic Eczema Rubrum of the Leg.

The next case is one of chronic eczema rubrum of the leg complicated with ulcers, occurring in a man about sixty years of age. The disease forms a continuous patch surrounding the leg; the lower half of a violaceous hue and crusted, the upper part of a more acute appearance and showing vesiculation. Just above the ankle is an ulcer, the size of a half dollar, and scattered over the leg are three or four smaller ones. These ulcers will tend to enlarge and run together, forming ultimately one of the chronic leg ulcers so often met with.

One of the best modes of treating these ulcers is that which we have employed in this case, namely, the use of the rubber bandage. Under this treatment he has slowly improved. Sometimes the use of the rubber bandage tends to aggravate the eczema, but in many of such cases the bandage may be borne by first covering the leg with a cloth. We will continue the bandage on the lower part of the leg, and on the upper part where the disease is more acute and accompanied with itching, we will apply a powder composed of equal parts of oxide of zinc and starch.

Case 6.—Hyperidrosis of Feet and Hands.

A man about thirty-five years of age, who is troubled with excessive sweating of the feet, comes to us for advice. The soles of his feet, you see, present a whitish, macerated and somewhat excoriated appearance, most marked about the heels, where minute beads of sweat may also be detected. The condition you see here is characteristic of the disorder, which is known technically as hyperidrosis. He has been troubled with it, he says, for six months. The palms of the hands are also affected, but he has attributed that to the nature of his employment, which, however, has nothing to do with it.

The treatment to be employed is entirely a local one. We will use a preparation of salicylic acid, composed as follows:—

℞.	Salicylic acid,	4 parts
	Starch,	6 parts
	Silicate of magnesia (or talc),	90 parts.

This silicate of magnesia is what is known in the shops as Venetian talc. The powder has been used extensively abroad, particularly in the Prussian army. If the case does not improve in a week or two of this treatment we will substitute the tincture of belladonna, to be applied twice a day. In many cases this produces a remarkable effect.

Case 7.—Mucous Patch.

The next patient, a young man, about twenty-five years of age, has been under treatment about six months for a papulo-squamous syphiloderm, and mucous patches; the primary lesion having occurred about a year ago. We have not seen him for some time. As is usual in these cases, after the symptoms have disappeared under treatment, the patients regard themselves cured, and cease their visits. In this case the eruption has entirely disappeared, but he returns to us with a mucous patch, the size of a dime, irregular in outline, occupying the inner surface of the right side of the lower lip. It made its appearance three months ago, he says, and is continually increasing in size.

The treatment to be employed for mucous patches is the local application, by means of a camel's hair brush, of the acid nitrate of mercury, in the strength of one part to eight or ten of water; or a solution of nitrate of silver, ten or twenty grains to the ounce. Internally, we will give him the protiodide of mercury, in doses of one-sixth or one-fourth of a grain. The mercurial treatment should be continued for one or two years, and we always earnestly advise this, though we know our advice may not be heeded.

Case 8.—Eczema, with Dermatitis.

This woman, about forty-five years of age, shows a diseased condition of the back of the right forearm and hand, characterized by a continuous, markedly inflamed, somewhat crusted patch. Six weeks ago she was troubled by severe itching in this region, probably due to a beginning eczema. She applied for relief to some druggist, who, though probably entirely ignorant of the nature of her trouble, did not hesitate to prescribe some stimulating preparation, the application of which was immediately followed by this severe dermatitis, which has continued to the present time. The case is but an illustration of what frequently happens from the reprehensible practice of druggists assuming the function of the physician.

We will use a preparation of lead water and

oxide of zinc ointment, to allay the inflammation, and will ask to see the case again in a few days.

Case 9.—Excoriations from Pruritus.

An interesting case is presented here, in a woman, about fifty years of age, who shows strikingly marked excoriations over the entire surface of the back, shoulders, and upper part of arms, together with erythematous streaks and patches, all the result of violent scratching. As there are no lesions that would indicate anything else, her itching is due either to pediculosis, *i. e.*, body lice, or to pruritus. A careful examination of the underclothing is always necessary in such cases, to determine the question, the patient's statements not always being sufficiently reliable. The picture presented is a striking illustration of the excoriations patients will sometimes produce on themselves in cases of skin disease.

Over the shoulder blades in particular you see how the skin has been denuded in patches and streaks, an inch or even two inches in length. The examination for pediculosis will be made, and the case treated according to the result.

To allay the itching we may employ the preparation of carbolic acid frequently prescribed in this clinic, viz:—

℞.	Acidi carbolici,		ʒiss
	Glycerinæ,		fʒiv
	Alcoholis,		fʒj
	Aquæ,	ad	Oj. M.

Sig.—Apply freely thrice daily, as a lotion.

(No pediculi were found.—Rep.).

Editorial Department.

Periscope.

Concealed Uterine Hemorrhage.

Before the Obstetrical Society of London (*British Medical Journal*) Dr. Horne read the notes of a case of concealed hemorrhage occurring in a woman, Mrs. B., aged 34, pregnant with her seventh child, otherwise healthy. Previous labors had been easy and uncomplicated. On November 11th, 1881, she went to the Rotunda Hospital; she was then weak and pale, with a moist skin, and was complaining of a feeling of extreme faintness, and of pain shooting down to the groins. She stated that on the previous day she had been exercising rather unduly. Examination showed the external os uteri to be patulous, the internal being closed. No presentation could be made out. Dr. Horne tried to rupture the membranes, but got no liquor amnii, nor could the fœtus be felt. There was the abdominal tumor, and the woman's history that she was far on in pregnancy; but palpation and the stethoscopic examination gave only negative results. The vagina was, therefore, plugged, and on the second day the fœtus, stillborn, was found in the vagina, covered with the unbroken membranes, and the placenta attached. A large clot of blood was subsequently expelled from the uterus, and the woman made a good recovery. Dr. Horne had found records of thirty-seven cases; in twenty-three the mother died; in all, the child was still-born. Out of one hundred and ten cases, compiled by German authors, fifty-six mothers died; while seven children were saved. The cases were to be recognized by the presence of all the symptoms of hemorrhage, without visible bleeding, a tense uterus with pain over it, but at no time true labor pains. The first question that suggested itself was, was the woman pregnant or not, for no fœtus could be felt? The question of treatment was an important one, and one on which some difference of opinion existed. Was it better to treat it like a case of ordinary accidental hemorrhage, or procrastinate, in order to conserve the patient's strength? The latter was the line adopted in the present case, and with the favorable result recorded. Dr. Kidd thought that the great difficulty was the diagnosis. He saw a case of a lady who, when eight or nine months' pregnant, fell down stairs; pain set in, soon followed by collapse, which passed off in a few hours. He found the uterus enlarged and doughy; the os was closed; there was no hemorrhage in the vagina. He introduced a Barnes' bag, dilated the os, and delivered as quickly as possible; but the woman died. The best practice in such cases was to dilate the os and deliver as quickly as possible, unless the woman were actually collapsed and pulseless. Dr. Denham related a case which had occurred in Dr. Johnston's practice. A lady, between eight and nine months' pregnant, was suddenly seized with a fainting fit, and all the symptoms of hemorrhage except external bleeding, not a single drop appearing externally; she died, and the post-mortem examination showed the placenta to be adherent all round its margin, but detached on its flat surface completely, and a large hemorrhage separating it from the uterine wall. He agreed with Dr. Kidd, that dilatation of the os and rapid delivery was the best treatment in such cases, but preferred to use his fingers instead of Barnes' bag. Dr. Atthill said that in the 14,000 cases which had been delivered during his mastership of the Rotunda Hospital, this was the only case of concealed hemorrhage, showing how rare it was. In all the recorded cases in which the membranes were ruptured, the patients died; he did not, therefore, think the practice a good one; and, considering the sudden emptying which occurred under such circumstances, there was every reason to believe that it would tend to produce fresh hemorrhage. He therefore advised that, unless the woman were dying or sinking, the membranes should not be ruptured, or delivery rapidly effected, unless uterine action could be first induced. Dr. Macan said that the rule on the Continent was not to rupture the mem-

branes unless the uterus was acting, for, by doing so, the only thing which restrained the hemorrhage—namely, the intra-uterine tension—was relieved. Pain he regarded as an important diagnostic. Women died from shock which was quite out of proportion to the amount of blood lost. He did not advise rupturing the membranes, but dilated the os by means of Hegar's dilators, as they were more easy of application than Barnes' bag. The utter want of uterine action in such cases made him think there must be something radically wrong with the uterus itself. Dr. Dill had long been impressed with the belief that the collapse was due to the shock of the hemorrhage, and not to the amount. He thought that a diagnosis could generally be made by the (1) history, (2) local pain, and (3) collapse. He advised an expectant line of treatment, sustaining the patient's strength, giving ergot, and encouraging uterine action.

Suicide.

The *Lancet* says: The distressing increase in the number of suicides has been commented upon again and again, but the facts which have been observed by different writers have recently been got together and published in such a complete form by the *Economiste Français* that it may be well to give a concise summary of them. Beginning with France, the writer points out that from 1827, since which year there has been a register of the number of suicides known to have been committed, the annual average has risen from about 1500 to upward of 6000, the number in 1851 having been 3639, or one suicide for every 9833 inhabitants, while in 1879 there were 6496 suicides, or one for every 5681 inhabitants. This increase of 78 per cent. is not peculiar to France, for in Prussia, from 1873 to 1877, the increase was 53 per cent., and in Bavaria 60 per cent. The proportion per million inhabitants rose from 66 in 1860-70 to 81 in 1875 in Belgium; from 74 in 1865 to 144 in 1877 in Austria; from 30 in 1874 to 41 in 1877 in Italy; from 23 in 1872 to 35 in 1876 in Russia; from 233 in 1874 to 257 in 1876 in Denmark; and in England, from 67.2 in 1866 to 69.2 in 1877.

It is a well-known fact that the great majority of suicides are committed by men, the average proportion of the different countries of Europe being 80 per cent. of men to 20 per cent. of women. Signor Morselli, in his well-known work entitled, "Il Suicidio," recently reviewed in our columns, holds that more women, proportionately, commit suicide in the country than in towns, and the figures which he is able to quote confirm this argument. In England the heaviest contingent of suicides is among men of from forty-five to fifty-five years of age. Among women suicide is most frequent in Sweden, Denmark, Bavaria, Prussia, Saxony, and Austria, between the ages of twenty and thirty, and in England between the ages of thirty five and forty-five.

It has been established by M. Bertillon that widowers and bachelors commit suicide more frequently than married men, the general proportion being about 54, as compared with 46 per cent.

There is a very great difference in the mode of committing suicide, as may be seen from the following table, showing the proportion per 1000 in five of the principal countries of Europe:—

	England.	*Prussia.*	*Italy.*	*Belgium.*	*Switzerland*
Hanging	368	608	167	545	430
Drowning	208	182	308	228	227
Firearms	46	109	244	118	70
Stabbing	206	54	55	39	67
Poisoning	94	30	61	23	33
Falling from height	94	9	113	15	11
Suffocating	94	8	22	4	13

In France 45 per cent. of the suicides are by hanging, 29 per cent. by drowning, 11 per cent. by shooting, 7 per cent. by suffocation, and 8 per cent. by jumping from high places; whereas forty years ago the most frequent mode of suicide in France was by drowning. As might be expected, suicide by drowning is more frequent in summer than it is in winter, the prevalent modes in the winter months being hanging and poison.

The most important chapter in this essay is that which relates to the causes of suicide, and the *Economiste Français* states that out of 30,128 cases of suicide registered in France during the years 1875 to 1879, 9175 were due to cerebral derangement, 5814 to physical suffering and various misfortunes, 4937 to love, jealousy, and dissipated conduct, 4085 to family bickerings, and 2867 to poverty. In the statistics of Prussia, from 1869 to 1877, the first place is held by mental disease, domestic afflictions and misconduct, physical suffering, and jealousy coming last. Mental derangement comes first in the causes of suicide in Belgium, Italy, and several other countries quoted by Signor Morselli, who asserts that altogether the suicides due to this cause are a third of the whole. It is almost a truism to say that the number of suicides has always increased or decreased according to the state of the country. Thus, in Vienna, the number of suicides, which had been 91, 141, and 153 in the three years preceding the financial crash of 1873, rose at once to 216, while after the dearth of 1854 the number of suicides rose from 3415, 1942, 991, and 150 in France, Prussia, Austria, and Belgium, to 3810, 2351, 1066, and 189.

While the number of suicides is greater in towns than in countries, it is also much greater among educated than among illiterate people. This is a rule to which there is no exception, Germany having a much larger proportion of suicides than Spain or Russia, and Belgium than Ireland. In most countries suicide is much more prevalent among Protestants than it is among Catholics, and especially among Jews. Herr Wagner, whose researches in regard to the causes of suicide are very well known, states that in Prussia, out of a million inhabitants there are 159.9 suicides of Protestants, as against 49.6 of Catholics and 46.4 of Jews; in Bavaria, 135.4 suicides of Protestants, as against 49.0 of Catholics, and 45.9 of Jews; and in Austria, 79.5 suicides of Protestants, as against 51.3 of Catholics and 20.7 of Jews. Speaking generally, it may be said that in countries which are purely Catholic, suicide is at the rate of 58 to the million, in countries where the religion is partly Catholic and partly Protestant, 96 to the million, and in solely Protestant countries, 190 to the

million. Such are the figures given by the *Economiste Français* in the course of a very interesting article; but it is somewhat startling to read, by way of conclusion, that the best remedy for suicide is to be found in a good sound education, the writer having, as mentioned above, just quoted figures to show that it is most frequent in those very countries where education is the most advanced.

Hyoscyamine.

Dr. Kenneth W. Millican thus writes, in the *Lancet*:—

Hyoscyamine is a drug which apparently possesses very valuable therapeutic properties, and like many other of the alkaloids requires only to be known to be appreciated. The first case in which I employed it was one of hepatic colic. Feeling convinced, from its combined anodyne and anti-spasmodic properties, that good results might be anticipated from its administration, I prescribed it in doses of $\frac{1}{120}$ gr. every half hour until relief was obtained. The patient, a woman who had several times previously passed gall-stones, was greatly relieved after three doses, and the administration was kept up at intervals of an hour until after the spasm ceased. I have several times used it in abdominal colic, in the same doses, frequently repeated, and on all occasions with the best results; and it has also proved the most effectual remedy in relieving the painful distress of spasmodic asthma. Indeed, in this latter complaint, my patient, a long-standing martyr to the affection, admits that it has given him more ease than any other drug he has taken, and has completely displaced chlorodyne in his estimation. But, perhaps, the most valuable case of its successful administration is the most recent of all. The patient was a young woman from service who, when I first saw her, was in the most intense abdominal pain. There was considerable diffused peritonitis, and for some time the cause was uncertain. I was at first disposed to suspect, from the history, a pyæmic origin, but ultimately concluded that the peritonitis resulted from collections of fæces at the hepatic and splenic flexures of the colon. Morphia was administered, both subcutaneously and by the mouth, and attempts were made to clear the bowels by bland enemata, but all to no avail. Having pushed the morphia as far as I dared, I was obliged to withhold its further administration, for though the pupil gave indications of its action, the pain did not seem to be in the least abated by it. After some time I determined to employ hyoscyamine, which I did, in doses of one-fortieth of a grain, every two hours. At first it seemed slightly to increase the pain, but shortly after its physiological action upon the fauces and pupil became manifest the pain began gradually to subside, and a fairly fluid evacuation of the bowels ensued. From that time the patient began to mend, and is now progressing fairly well. When I first used hyoscyamine I employed the granules manufactured by M. Chanteaud, the eminent French pharmacien. But recently I have used a solution of the alkaloid (Merck's crystallized), in rectified spirits of wine, of the strength of one grain in two drachms. One minim of this solution thus contains $\frac{1}{120}$ grain of the drug, which can either be administered in a mixture with a little dill water, or may be used to form lozenges with sugar of milk.

Persistent Hymen.

So much has been made of the presence of the hymen as a proof of virginity, that the following case, coming from so high an authority as Dr. Thomas, who presented it to the New York Obstetrical Society (New York *Medical Journal and Obstetrical Review*, May, 1882) will possess much interest in a medico-legal aspect:—

A German lady, belonging to the upper walks of life, had been married eight years, but had never become pregnant. Being dissatisfied, she consulted him with regard to the cause of her sterility. In reply to his questions she said her menses were perfectly normal, she had very little leucorrhœa, and the only symptom of which she complained was a good deal of backache. A vaginal examination was proposed, and on attempting to introduce his finger Dr. Thomas found it impossible to do so, on account of the presence of an unruptured hymen. The hymen was perforated by an opening only barely large enough to admit a common sized lead pencil. The woman, however, again affirmed that she had been married eight years, and said that her husband had had intercourse with her regularly, at least once or twice a week, and that there had been nothing abnormal about it whatever. When he explained to her the condition of things she laughed and said it was impossible; she could not still be a virgin. Her husband, whom she was requested to send to the speaker's office the next morning, came, and he also laughed when informed that his wife was a virgin, and told Dr. Thomas, in a pleasant sort of way, that he was a *farceur*. He was about thirty-eight years old, of good figure, and said that his sexual vigor was perfect; before his marriage he had been something of a man of the world, and knew very well what it was to have intercourse with women; he had been married eight years, had had intercourse with his wife regularly, and in a perfectly normal way. Having now placed himself in such relations to the man that he would have to prove his position, Dr. Thomas requested him to bring his wife to his office the next day, which he did. Placing the woman in position, Dr. Thomas separated the labia, and showed to her husband the exact state of things. He was amazed, and could only reiterate that intercourse had been regular during the eight years of their married life. It was proposed to remove the hymen and put in a glass plug; but the husband desired him to wait a week, for he thought that in the meantime he could make all right. At the end of the week, however, the man returned, and said he now recognized that he had never had intercourse with his wife in the proper way, but how he had been deceived during these eight years he could not possibly understand. The woman was afterwards etherized, the hymen was removed, and a glass plug was introduced. Her husband said that now everything was changed, greatly for the better.

Retractile Albumen.

The *Lancet* says, editorially: A distinction was drawn first by Bouchard, in 1880, between retractile and non-retractile albumen, and he sought to establish the clinical significance of the two varieties. When albuminous urine is coagulated by heat, the precipitate sometimes has a homogeneous appearance, but sometimes is in the form of definite flocculi. The latter he regarded as the normal albumen of the blood, which could only pass out by the kidneys if there was an actual alteration of the renal filter. On the other hand, the non-retractile albumen is altogether abnormal, dialysable, and capable of passing out through the kidneys, although these are in a normal state. Thus the character of retractility was supposed to be an indication of actual disease of the urinary organs. This supposed distinction has attracted much attention on the Continent. Unfortunately Lépine and Cazeneuve have shown that the difference in the form assumed by the coagulated albumen depends much more on the liquid in which the coagulation is effected than on the albumen. The addition of an alkali prevents retractility, and conversely, an apparently homogeneous precipitate retracts into flocculi if a little acetic acid is added, no doubt, in consequence of the decomposition of alkaline albuminates. These conclusions have been confirmed by a series of observations made during the past winter by Dr. Rodet, of Lyons. In some urine from a patient with typhoid fever, which contained a small quantity of albumen, on two successive testings, he obtained in one flocculent and in the other non-retractile albumen. The reagent employed was that preferred by Bouchard, Tanret's solution, which consists of iodide of mercury dissolved in iodide of potassium and acidulated with acetic acid. The effect was found to be due to the amount of the reagent employed; a small quantity caused manifest retractility, but with a larger quantity this character was only observed in a slight degree after the urine had been boiled for one or two minutes. In a specimen of highly albuminous urine from a case of acute nephritis a flocculent precipitate was obtained when Tanret's solution was added, in whatever quantity; but if the urine was dropped into the heated reagent, the precipitate was non-retractile. On diluting the urine the retractility of the albumen was found to progressively diminish. When slightly diluted a few drops of the reagent yielded large flocculi, but they were much smaller with a larger quantity of the reagent. An extensive dilution abolished all retractility, whatever amount of the reagent was employed. No doubt it was the small quantity of albumen which occasioned the absence of retractility in the febrile cases observed by Bouchard, and gave him the erroneous idea that the character indicated a change in the blood and not in the kidney. It is clear that the differences in the character of a precipitate of albumen depend much more on the liquid in which it is formed than on the composition or character of the albumen itself. Indeed, it is very doubtful whether there is any physical property in the precipitate which can properly be described by the word retractility.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——We have received the announcement of the Dental Department of the University of Maryland, for the session of 1882–83.

——"Our Thirtieth Year;" annual address before the Kentucky State Medical Society; delivered by J. W. Holland, M.D. A reprint from the Louisville *Medical News*.

——"The Special Therapeutic Value of Hyoscyamine in Psychiatry." By C. H. Hughes, M.D., of St. Louis. Reprint from the *Alienist and Neurologist*, April, 1882.

——"Acute Dementia Occurring in an Old Man. Recovery after two and one-half months of treatment." By C. H. Hughes, M.D., of St. Louis. A reprint from the *Alienist and Neurologist*, April 1882.

——We have received the thirty-third annual announcement of the Woman's Medical College of Pennsylvania. The college has a large list of matriculants, and seems to be in a very flourishing condition.

——"The Opium Habit, its Successful Treatment by the Avena Sativa;" a paper read by E. H. M. Sell, A.M., M.D., before the New York State Medical Society, February 9th, 1882, and reprinted from the *Medical Gazette*.

——The Essentials of a Law to Regulate the Practice of Medicine in Indiana. A paper full of wise suggestions, read by Thad M. Stevens, M.D., before the Mitchell (Ind.) District Medical Society, in New Albany, December 28th, 1881.

——We have received the Catalogue of the University of Pennsylvania for 1881-2. Containing, as it does, one hundred and eleven pages, we note a striking difference between this substantial volume of '82 and the comparatively insignificant catalogue of '72.

——The "Home Treatment of the Insane," by Samuel Ayres, M.D., of Pittsburgh, Pa., comes to us as a reprint from the Pittsburgh *Medical Journal*. This is an interesting and instructive pamphlet, the perusal of which will amply repay the time it consumes.

——The History of Three Cases of Hip Disease in the Third Stage. By A. B. Judson, M.D., Orthopedic Surgeon to the Out-patient Department of the New York Hospital. Reprint from Illustrated Medicine and Surgery. This is a valuable and very interesting paper, well illustrated.

——Sanitary Survey of Indianapolis, Topography and Surface Geology, Water Supply, Disposal of Excreta, Cellar and Yard Filth, etc. This comes as a reprint from the *Transactions* of the Indiana State Medical Society, 1880, and is a pamphlet possessing peculiar interest to all who have any love for hygiene.

——We have received the report of the sixth annual meeting of the American Medical College Association, held at Cincinnati, May 16th, 1882. The tone of the meeting, and the spirit of the members present, indicated that the Association has entered upon a more hopeful future. Dr. W. W. Seeley, of Cincinnati, is President; and Dr. Leartus Connor, of Detroit, Secretary.

——"Rupture of the Eyeball in its Posterior Hemisphere, from a Blow in the Face." By Julian J. Chisolm, M.D., of Baltimore. "Two Cases of Malignant Tumor of the Sphenoidal Cavities, Implicating Vision." By Julian J. Chisolm, M.D., of Baltimore. These two papers, reprints from the Archives of Ophthalmology, have been received, with the author's compliments.

——"Operation for Radical Cure of Chronic Hernia." By Edward Von Donhoff, A.M., M.D., Louisville, Ky. This little pamphlet describes the author's operation, which in substance is as follows:—

First. The ordinary incision.

Second. The opening of the sac and reposition of the gut.

Third. Cutting away the sac within an inch from the ring, and when not too large (as in some scrotal hernias), dissecting out the distal portions.

Fourth. Closure of the mouth of the sac-neck, by means of strong, double sutures, entered through the skin three-quarters of an inch from the cut edge, thence passed through the sac-wall (both sides), a half-inch from its extremity, the needle making its exit through the opposite skin-flap. As many sutures will be used as are required to securely close the lumen of the neck, and will be quite firmly tied. (The remainder of the incision to be closed as ordinarily.)

Finally. The application of a firm, flat compress, moistened with water, and confined by a spica, will complete the operation.

It is intended, by the means advised, *to secure a broad, firm union between the cut end of the sac and the immediately overlying skin, and a union of the approximate sides of the lumen of the neck.* This accomplished, I think all future trouble from the hernia (?) will have been successfully warded off. If the distal portion of the sac be not removed at the time of the operation, it may be left for after consideration.

BOOK NOTICES.

The Physician Himself and What He Should Add to the Strictly Scientific. By D. W. Cathell, M.D., late Professor of Pathology in the College of Physicians and Surgeons of Baltimore. pp. 194. Baltimore: Cushings & Bailey. 1882.

This book has been prepared with the view of telling the young physician how to procure practice. While we do not believe in and cannot sanction physicians who advertise, no matter howsoever discreetly they may cover up their advertising tracks, yet since this volume starts out with the fundamental principle that it is necessary for the physician who desires to be successful to have a thorough knowledge of his profession; and since the advice that it contains counsels nothing that would be unbecoming a gentleman and a physician, therefore, can we recommend it to those young men who, though thoroughly competent, yet are commencing to despair of ever procuring a practice.

The Experimental Method in Medical Science. Second Course of the Cartwright Lectures of the Alumni Association, College of Physicians and Surgeons, New York. By John C. Dalton, M.D. pp. 108. New York: G. P. Putnam's Sons. 1882.

A more readable and interesting little volume one will rarely have the good fortune to hear of. It contains three lectures: Lecture I, "Galvani and Galvanism in the Study of the Nervous System." Lecture II, "Buffon and Bonnet in the Eighteenth Century." Lecture III, "Nervous Degenerations, and the Theory of Sir Charles Bell." They are all extremely interesting, but particularly so is the one which treats of the theories of Buffon and Bonnet. The leisure time of the busy practitioner could not possibly be put to better use than by the perusal of just such works as this.

Materia Medica and Therapeutics; Inorganic Substances. By Charles D. F. Phillips, M.D., Member of the Royal College of Physicians, etc. Edited and Adapted to the United States Pharmacopœia, by Laurence Johnson, A.M., M.D. Lecturer on Medical Botany, Medical Department, University of the City of New York. Vol. II. pp. 340. New York: William Wood & Co., 1882.

This volume constitutes the May number of Wood's Library of Standard Medical Authors. Vol. I has been already noticed.

THE

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HOTBEDS OF DISEASE.

In this age of sanitary progress it behooves us to, and generally we do, look carefully for any causes of disease that may exist around us, and endeavor to remove them. But with the same experience as is met in other fields, it very often happens that while we recognize and make much of slight and trivial matters, we allow to continue unnoticed and unremedied some of the most serious and most fatal disease producing agencies. We make a great outcry against dirty streets, and rightly so; we complain of impure water, and justly; we object to the proximity of manufacturing establishments in which dead organic matter is used, and rightly. These are all potent causes of disease, and we must object to them and have the trouble remedied. But there is another terrible source of ill health, working insidiously (so far as the majority who do not see the evil are concerned), but surely all the time, poisoning the systems and sapping the health of those who fondly and delusively imagine that they are surrounded by all the conditions necessary for healthy and lengthy life.

In every large city that has attained any age will be found a section known generically as the "*slums*," in which are huddled together the vilest, foulest, most degraded and diseased members of the community. Very few of the better class of inhabitants ever see these sections, since they have no business in these neighborhoods. The inhabitants of the *slums*, men, women and children, are so disfigured, disgraced and deformed by the wretched, diseased lives they live, that, in truth, they can scarcely be called human beings. With but an exceedingly rare exception they are all drunkards; their whole lives are passed in a state of intoxication, and this condition is produced by the use of the most vitiated and poisonous liquor. Their food is the poorest and scantiest imaginable, nearly all of it procured by begging or theft. Morality is one of the "lost arts" among them, hence the most loathsome diseases are the rule. Indeed, the venereal wards of the pauper hospitals are filled with the most disgusting and repulsive patients from the slums. Water is not, by them, considered of any use in the world; their filth of body and clothes is something marvelous; you would wonder how any human being could possibly get so dirty. As a natural consequence of all this foulness the houses are absolutely saturated with disease germs, and I verily believe that PASTEUR could almost find bacilli of disease in the bricks of the sidewalks and the cobbles of the streets. The whole section, houses, streets, women, men, children, black and white, for they all live huddled together indiscriminately, the white woman with a black husband and vice versa, dogs, cats, atmosphere, everything and everybody are rotten, are reeking with disease.

In this section we have our *hotbed* of disease. From this nursery, under these favorable circumstances, are generated the elements of disease that are wafted by the winds throughout the city, to poison and disease the millionaire in his palace, who probably is ignorant that any such place exists. It is only necessary for one to walk through any one of these sections to believe firmly this statement. But the remedy!

Simple enough. Almost constantly some rich man is dying and leaving an enormous fortune to erect or endow some institution of learning. Education is one of our greatest blessings, and deserves much encouragement, but the prevention of disease and preservation of health is a more important consideration. Now, then, the following plan ought to be carried out by the city government, but if such is impossible of achievement, then should it be suggested to some wealthy philanthropist. The properties in this section should be bought and *demolished.* This would force the worthless and dangerous population away from their filth and squalor into a location much cleaner and purer, when, by judicious use of moral suasion, their repulsive, brutish natures might be elevated some little. Surroundings have much influence on the nature and mode of life of an individual, and it is to be greatly feared that no amount of persuasion can ever have any permanently good effect on a class of persons surrounded, as these wretches are, by disease, filth, gloom and misery. It is true, as has been said, that to many this state of affairs has assumed the relation of a second nature, and that they prefer such a life and surroundings. To a certain extent, this is true; they know no better life, and are seemingly content with what they have. But their very lives, their actions, all evince a sense of despair altogether incompatible with true contentment.

By resorting to some such measures as suggested a double good would be accomplished. These poor, miserable beings might be elevated and improved, while the general health of the city would undoubtedly be benefited.

THE ATROPHIC KIDNEY.

(*Nephritis atrophicans*).

A short time ago Prof. Biermer gave an interesting description of the atrophic kidney, at a meeting of the physicians in Breslau. We take the following from a report of the *Deutsche Medicinal Zeitung.*

Biermer describes the genuine atrophy of the kidneys as a special disease, distinct from *morbus Brightii.* The course of the malady is as follows: There does not exist a special etiology of the genuine atrophic kidney, but frequently exposure to cold, and especially wet feet, are mentioned as cause. The disease runs, from the beginning, an insidious and chronic course. In the first stage we generally find moderate albuminuria, polyuria and slowly progressing deterioration of the general nutrition of the body. Later two more stages may be distinguished: the second stage, during which the changes taking place in the heart and in the pulse become plainly apparent, but where the hypertrophy of the heart compensates for the disturbance in the kidneys; and the third stage, in which this compensation ceases and uræmic symptoms, besides an extreme emaciation bordering almost on marasmus, develop themselves. The malady may continue several years ere death sets in. The pressure of albumen in the urine is a *sine qua non* to establish the diagnosis; while generally the urine of the atrophic kidney is excreted in large quantities, of low specific gravity, comparatively poor in urea and other solid constituents, mostly free of sediment, and containing a changeable, though mostly small amount of albumen, and very little epithelium, and few casts. The polyuria is generally not connected with polydipsia. The hypertrophy of the heart is usually confined to the left ventricle and presents the concentric form, without dilatation. The pulse is tense; its frequency varying greatly. Palpitation is a rare symptom. Of great diagnostic value are disturbances of vision and positive signs on the retina. Disturbances of respiration are, perhaps, never absent during the course of this complaint. Brain symptoms might not develop themselves till the uræmic stage is reached, but even then they may be wanting till death takes place, which mostly happens under stupor or coma. Want of appetite and dyspepsia may be present or absent. Vomiting has its origin mostly in uræmia, especially when a frequent symptom. General disturbance of nutrition is never wanting. One might say that blood and fat dwindle away together with the kidney. This is one of the distinguishing marks by which

nephritis atrophicans is immediately recognized from harmless, functional albuminuria. A person whose urine contains albumen for a long time, and who does not become emaciated, but rather stout and corpulent, does surely not suffer from an atrophic kidney. The presence of dropsy proves that the case is not one of genuine atrophic kidney, but either one of secondary atrophy or that complications exist. An actually effective treatment of the disease is not known. Any diminution in the excretion of the urine has to be guarded against; astringents, therefore, as lead, silver, ergot or tannic acid, are to be avoided. To increase the quantity of the urine, scilla, digitalis, mineral waters and other mild diuretics as well as tonics are indicated. In the uræmic stage only the narcotics seem to be of any value.

Notes and Comments.

Glycerinum Boracis, for Chancres.

In the *Lancet*, Dr. George Thin relates some very interesting and valuable results derived from the use of the glycerinum boracis in the treatment of chancres. In the first case he describes, a man infects his wife, and for some time no treatment is resorted to. The sore continues to enlarge, and is finally cauterized several times, but without avail, and when Dr. Thin first saw the case, he found a sore, the size of a dime, on the side of the vagina, covered, except at the edges, with a black, sloughy-looking mass. The sore was kept constantly bathed in glycerinum boracis; the inflammatory action subsided, the surface became clean, and the ulcer healed without a bad symptom. While this treatment was going on, a little vesicle appeared on the fourchette, which burst and left a small chancre, which did not spread laterally, but eat down into the tissue for at least a quarter of an inch. The channel was plugged with cotton wadding soaked in glycerinum boracis, and it immediately commenced to heal from the bottom and was soon well.

In the second case there were four chancres on the glans penis, and phimosis supervened. Zinc ointment and black wash were applied, but the inflammation increased. Painting with tincture of iron improved them a little. Subsequently caustic was applied, which greatly increased the inflammation. Dr. Thin saw him two months after the chancres were first contracted, when he had phimosis, with considerable pain and swelling, and it was impossible to retract the foreskin sufficiently to see all the sores. One was seen to be covered with a dirty gray, membranous-looking substance. He was directed to insert, with a blunt probe, pieces of lint soaked in glycerinum boracis, so as to keep the glans and inner surface of the prepuce completely bathed in the solution. Five days afterwards the foreskin could be retracted completely, and all the sores looked healthy, and within ten days they were well.

The third case was very similar. He used this remedy, on the ground that, if the poison keeping up the inflammation was of a parasitic nature, it might be destroyed by the antiseptic properties of borax. His results were so satisfactory, that he proposes in the future to give it a trial in hospital gangrene.

Hemorrhage and Gangrene from a Carious Tooth.

In the St. Louis *Medical and Surgical Journal*, Dr. William A. Byrd reports the following case: He was called to see a boy between seven and eight years of age who was suffering from gangrene of the left side of the face and neck, accompanied with severe hemorrhage. The child was very anæmic, with the left side of the face swollen, with an opening that would admit the point of a finger, opposite the sub-maxillary gland, another in the meatus auditorius, and another in the mouth opposite to the outside of the first molar tooth; from all these openings was flowing a dark, very offensive fluid, mixed with arterial blood, and also, shreds of gangrenous connective tissue protruded from them. For some weeks the child had suffered from an offensive discharge from the left ear; and about two weeks before I saw him the first left molar tooth commenced aching and the jaw to swell. Subsequently a black spot appeared opposite the tooth, and at this spot the skin gave way, giving vent to a dark, very offensive discharge. The swelling from the ear and the tooth coalesced and the abscess broke into the ear and mouth, causing a profuse discharge from each. In a day or two blood was freely discharged from all three openings. The patient was etherized, and it was discovered that the bleeding came from so many points that it would be impracticable to secure all of them without too great a loss of blood and shock to the patient. It was, therefore, decided to ligate the common carotid, which was done with catgut. Through the incision a great quantity of gangrenous matter was removed as high

as above the zygoma and down nearly to the clavicle. The cavity was carefully washed out with a solution of boracic acid and packed with oakum soaked in eucalyptol and vaseline. He rallied well and seemed brighter, but sank again, and died on the second day. Dr. Byrd thinks that the carious tooth was the origin of the trouble, and that if it had been attended to in time the result would most likely have been different.

Gall Stones in an Infant.

Dr. A. Dunbar Walker contributes the following interesting case to the *British Medical Journal*. He saw a male child, three months old, who had been brought up entirely at the breast, and had always been healthy, excepting a slight attack of jaundice, a few days after birth. In the evening it commenced to cry, and continued to do so almost uninterruptedly for six hours, when a sedative mixture afforded a little restless sleep. The next morning a dose of castor oil was given, which soon caused an evacuation. The passage was healthy in appearance, but upon close inspection, three small ovoid bodies, dark green in color, and as hard as wax, were found. The larger one weighed two grains, the other two were much smaller. These substances seemed to consist of cholesterine; minute particles of the coloring matter of the bile could be detected here and there. This occurrence might account for the crying in many cases, and it would suggest the advisability of looking for these gall stones in the case of fretful children.

Corpus Luteum.

Before a recent meeting of the Obstetrical Society of London (*British Medical Journal*), a paper on the above subject was read. Two cases were described. The first was that of a prostitute, aged twenty-one, who died from prussic acid poisoning. In her ovary a fully ripe corpus luteum was found, although she was neither pregnant nor menstruating. The difference between the corpus luteum of pregnancy and that of menstruation was usually ascribed to the increased amount of nourishment received by the follicle in the pregnant state. In this case, he thought that prostitution was probably the cause of the increased nutrition and development of the follicle. The second case was that of a woman, aged forty-one, who died from gangrene of a uterine fibro-myoma. The ovary contained a true corpus luteum, and in other respects resembled the ovary of a pregnant woman. In this case, he thought the increased determination of blood to the part, in consequence of the fibroid, was the explanation of the size of the corpus luteum. The President said that it was important to have the view confirmed that a corpus luteum, having all the characters of that met with in pregnancy, occurred in women who were neither pregnant nor menstruating. He had seen such a corpus luteum in an aged woman, who was believed to be salacious, and he had dissected cases of pregnancy with complete absence of corpus luteum.

Water of the Sacred Springs at Mecca.

The *Journal d' Hygiene* gives the following extract from a letter of Dr. Frankland, regarding the water of the springs at Mecca, regarded as sacred by the Mohammedans:—

"This particular sacred spring is situated at Mecca, and the water is sent in large quantities to the various Mohammedan nations; certain princes have, indeed, a special envoy to send them, each year, a number of bottles of water from the spring. Dr. Frankland says he had the curiosity to make a complete analysis of the water, and found it to be a veritable sewer water, seven times more concentrated than that of the London sewers, for it contains not less than 579 grains of solid matter per gallon.

There is not, probably, a more active means of propagation of epidemics through the Eastern nations.

Removal of Foreign Bodies from the Ear.

In the Detroit *Lancet*, Dr. A. F. Kinne, after pointing out the defects in all the existing instruments and methods for the removal of foreign bodies from the ear, describes a simple instrument, devised by himself, for this purpose, which has answered admirably. It really consists of a minute, sharp-pointed, tenaculum-shaped hook, on the reverse end of which there is a small, blunt hook, for the removal of foreign bodies from the nose. In order to remove a foreign body that has been pushed through the tympanum into the deeper recesses of the ear, it may, in some cases, become necessary to detach the auricle before an instrument can be brought to bear upon it. As a justification for this operation, he relates the following case:—

About twenty-five years ago, I was called to a well grown boy, whose ear had been torn off, close to his head, by a wagon wheel. The wound was ragged and dirty, and the bystanders

thought the ear "no good;" but the skin in front of it was not torn through, and I decided to attempt its restoration, and succeeded. I pinned it on with cambric needles, annealed and curved. And, mindful of the danger that the ear might slough, when I passed my ligature around the ends of these, I sought to bring the torn edges into close apposition, without drawing it tightly enough to interrupt the local circulation.

Of course, very complete access to the middle ear is gained by detachment of the auricle. And, as to the feasibility of the operation, two questions, and the only ones of any consequence, were settled well enough by the results of this accident. First, an ear will grow on again, even if the incisions by which it is detached are not smooth and clean; and second, the resultant scar is of no consequence, especially when it is located behind the ear.

Prevention of Diphtheritic Infection.

M. Hager, in the *Pharm. Centralblatt.*, recommends lozenges, composed after the following formula, to persons who are exposed to the infection of diphtheria:—

℞.	Ceræ alb.,	℥ v	
	Colophon.,	℥ iss.	M.

Melt together, and then add—

℞.	Tolutan. bals.,	℥ iiss	
	Pulv. aromat.,	℥ iss	
	Sacch. alb.,	℥ v	
	Ac. benzoic.,	℥ iss–iiss.	M.

Reduce to fine powder, and aromatize with—

℞.	Ol. cinnamomi,	♏ x	
	Creasot.,	℥ j.	M.

After the mass has cooled divide into 100 pastilles.

One of these lozenges should be very slowly masticated, four or five times daily.

Treatment of Fissure of the Anus Complicating Chronic Metritis.

Fissure at the anus is frequently observed in women affected with parenchymatous or endo metritis. The most frequent cause for this affection is the chronic congested condition which exists about the anal region, as well as in the uterus and its appendages. In connection with this, there is almost constantly obstinate constipation. Surgical treatment in such cases is not always of benefit, particularly when the fissure has not induced contracture of the sphincters.

Two forms are observed in practice: In the first the fissure is of old date, and its borders are hard and callous.

In such a case, M. Chéron, in a recent number of the *Rev. med. chir. des maladies des femmes*, recommends that massage over the part, with the pulp of the index finger, should be made every day; then he places in the fissure a small metallic cylinder, connected with the negative pole from two elements of the pile, the positive pole having an electrode as large as possible.

Five minutes' application is sufficient to produce a modifying chemical action without causing any pain.

A calming unguent is applied each evening to the fissure:—

℞.	Ext. digitalis,	℥ ss	
	Ext. belladonnæ,	gr. xvss	
	Adipis,	℥ j.	M.

A dozen applications generally suffice for cure.

In the second form there are no indurated borders, but the parts are painful and sensitive when touched. In such a case iodoform is recommended:—

℞.	Iodoform,	gr. xvss	
	Balsam Peru,	℥ j	
	Adipis,	℥ j.	M.

If there is spasm of the sphincter muscle, gradual dilatation may be established by the introduction of a bivalve speculum, once every four or five days.

Dental Tumor of Jaw.

In the *Canada Medical Record*, Dr. C. E. Nelson relates the case of a girl of 15, who was suffering from a large tumor of the lower jaw, which had been steadily growing for about six months. For four months the pain had been so severe that morphia had to be used continuously. A distinguished surgeon diagnosed malignant disease, and advised immediate removal of the tumor, along with a considerable portion of the jaw bone. The day before the proposed operation, a dentist was consulted, who, after a careful examination, came to the conclusion that the tumor was not malignant, but was caused by the presence in the jawbone of several of the second teeth, which had not yet been evolved. The tumor was freely opened, a quantity of extremely fetid matter was discharged, and the pain was instantly relieved. A probe revealed that the anterior surface of the bone below the incisors had been absorbed, and at the bottom of the cavity so formed several hard bodies could be felt imbedded in the bone. The cavity was cleaned out and packed with lint soaked in a solution of chloride of zinc. Antiseptic applications were used regularly, but the wound continued to discharge a thick, black and very fetid fluid. By the end of six weeks three

teeth could be distinguished, viz., the right canine and two right lateral incisors, and at the end of three months these teeth were extracted through the opening made when the tumor was lanced. A year afterwards the cavity had filled up and the jaw returned to its normal shape.

Danger from Toy Paint Tablets.

As these small boxes of paint tablets are sold at very low prices to children at all the toy shops, it is right to call the attention of the profession to their dangerous composition. We read in a recent number of the *Revue d' Hygiene et de Police Sanitaire*, that a child was recently poisoned in Epinal from eating a green colored tablet. The central commission of hygiene procured a number of tablets from the toy shops of Epinal, and on examination found them to consist of sulphate or carbonate of calcium and an arsenical composition (either Scheele's or Schweinfurt's green), one specimen containing the enormous proportion of 20 per cent. of the arsenical color.

Certain it is that colors are made which are innocuous, but not at the price these small boxes are sold, and the matter should receive further and careful attention.

Epidemic of Tinea Tonsurans.

At the last séance of the Conseil d'Hygiene et de Salubrité of the Seine Department, M. Hillairet presented a very interesting report on the prevalence and rapid spread of tinea tonsurans in the 11th arrondissement of Paris. It was first particularly remarked in an orphan asylum, where it was imported by a day scholar; in a few days nineteen of the inmates contracted the disease. Energetic measures were immediately set on foot to arrest its ravages; the infected children were isolated in a special dormitory and not allowed to eat or play with the other inmates of the school. The treatment advised by M. Lailler consists in repeated epilation, frequent washing with castile soap, and applications with ointment containing turpeth mineral; in connection with this the children are obliged to wear continually a skull cap.

M. Hillairet, in attempting to trace the origin of the disease, found that there existed a number of cases among children and adults in the Charonne quarter, including several cases in the schools. As the disease is propagated with extreme facility, and requires, for complete cure, assiduous and long-continued treatment, M. Hillairet recommends careful search into the conditions of the arrondissement, and isolation as far as possible of the individuals affected. Without such precautions he fears a rapid spread of the evil to surrounding sections of the city.

In connection with the report, it is interesting to note that there is a corps of "epileurs" attached to several of the hospitals of Paris, demonstrating that such diseases are rather common.

Treatment of Scarlatina.

Dr. Lervis, we read in a recent number of *Le Progrès Médical*, recommends digitalis to limit the acceleration of the pulse in scarlatina and also as a prophylactic against renal complications.

The infusion of digitalis should be given as soon as possible after the début of the malady, and continued up to the third week. The whole body should be anointed with oil twice daily until desquamation is completed.

To prevent the development of diphtheritic angina he recommends the following potion:—

℞.	Potass. chlorat.,	℥j
	Tr. ferri perchlorid.,	℥ij
	Glycerinæ,	℥j
	Aquæ destil.,	℥viij. M.

A teaspoonful should be given every half hour.

Billroth on Removal of Cancer.

In the course of a letter from Billroth to Dr. Wywodzew, concerning the nature of the last illness of Pirogoff (a translation of which appeared in the Boston *Medical and Surgical Journal*), this great surgeon, discussing the propriety of operative interference for the relief of cancer of the jaw, from which Pirogoff was suffering, says: "Interesting and instructive as the results of the microscopic examination are in such cases, and the etiology of the development anatomically so well illustrated, the diagnois of cancer in this case would not have influenced me to an operation. A man over seventy, of active mental habits, yet showing all the signs of bodily marasmus, with a cataract in each eye, etc., has no possible chance of withstanding an operation such as I would have been compelled to make, even in order to prevent a recurrence for a very short period of time. My experience, of thirty years, as a surgeon, has taught me that those sarcomata and carcinomata which originate away back on the upper jaw can never be radically removed by operative interference, when one operates so as to provide for the probability of the patient surviving the operation. One is so disturbed in this region, partly by technicalities, part ana-

tomically, that a true and total extirpation cannot be made, save in those isolated cases where one has to do with an encapsulated tumor. I am no longer the bold, unterrified operator I used to be."

Manner of Administering Tannin.

Tannin, given by the mouth, either in powder or in simple solution, often gives bad results; sometimes having no effect, and often causing pain or inflammation of the stomach and intestines. At the polyclinic of Leipsic, this is avoided by the use of the following mixture, of agreeable taste, yet astringent, and easy taken by children; it is an albuminate of tannin:—

℞.	Tannic acid,	ʒj	
	White of egg,	ʒiij	
	Water,	ʒiij.	M.

While adding the white of egg, the mixture should be continually agitated.

Treatment of Sycosis.

According to M. Bouchut (*Jour. de Connoissances Med.*), sycosis may sometimes be cured without epilation, by means of applications, made morning and evening with an unguent, of which creasote is the active element. He recommends the following formula:—

℞.	Creasot.,	♏xx ad fʒ ss	
	Zinci oxid.,	ʒiss	
	Ung. simpl. benzoat.,	ʒj.	M.

After each application of the ointment the affected parts should be covered with oiled silk.

Correspondence.

Dialysed Iron in the Treatment of Arsenical Poisoning.

Ed. Med. and Surg. Reporter:—

It is not my intention to enter into an exhaustive paper on the subject of Arsenical Poisoning, but simply, as a duty, to lay before the profession what I consider a most valuable aid, the administration of dialysed iron. In the smelting of lead and silver ores, one of the worst features is the constant inhalation of arsenical fumes. When first employed by the Alta Montana Company, to take charge of their hospital, a number of cases of arsenical poisoning came under my observation, and they were the more difficult to treat on account of their complication with "leading." I tried the various remedies recommended for such cases, with but poor results. At times I felt that old saying, "Throw physic to the dogs," was but too true and applicable. At last I was led to try dialysed iron, and was met in all cases with most gratifying success, as is evidenced by the following cases:—

Two carpenters were engaged in roofing a portion of the smelting building, and were in such a position that the wind carried the fumes into their faces. Some workmen below noticed one of the men swaying to and fro, and about ready to fall, while the other was laboring hard to reach the ground. They were helped to the hospital, and were suffering with severe pain in stomach and bowels, nausea, vomiting, vertigo, and with a profuse "nose-bleed," tremor in lower limbs, and almost prostration. A wineglassful of dialysed iron was given immediately. The nausea ceased, and at the end of one hour the men were able to walk to their cabins, carrying with them a bottle of the iron, to be taken in drachm doses every half hour. At the end of twenty-four hours they complained only of weakness, such as would result from a severe diarrhœa. The second day they resumed work, entirely free from all pain and effects of the arsenic. A number of men employed about the smelting furnace, and especially in dipping the molten lead, have been apparently prostrated, from the effects of the fumes, and were in every case relieved by dialysed iron. A mild purgative was given within twelve hours. I have recommended, and, indeed, insisted on, every man who is exposed to the arsenical fumes, taking a dose of the iron daily. The consequence has been, that we have had but one case of poisoning needing hospital treatment, and this one insisted that his case was one of "indigestion and dyspepsia," and would take nothing till compelled to enter the hospital, where, under the administration of dialysed iron, he speedily recovered.

In the past two years, I think I am safe in saying that fully two hundred cases of arsenical poisoning have been cured in this camp by dialysed iron. I could cite any or all of them, with symptoms, treatment etc., but I think it unnecessary, as they so nearly resemble those already mentioned; suffice it to say, that all experienced the nausea, griping, vomiting, muscular tremor, etc. I have given the iron, in half-ounce doses, three times daily, with no constitutional disturbances whatever, even after ten and often twenty days administration. The teeth are not discolored, bowels not constipated, and digestion not deranged.

The men have learned its virtues, and come regularly with "please fill my iron bottle again." They will not do without it, any more than an Irishman will do without his "salts and senna." It has saved many a man his wages and many a day of sickness. In fact, I feel convinced that this preparation is indispensable where men are liable to inhale the fumes of arsenic.

Without a remedy of this kind, I am satisfied no man, however strong, could inhale the fumes incident to smelting, where the ores contain arsenic, and stand it more than three or four days. I can fully and confidently recommend this preparation of iron to the profession, and even to foremen of smelting works where there is no physician, for it is harmless and invaluable. An ounce of prevention is worth a pound of cure;" or a "pound of cure," is worth infinitely more to a company, than are hospitals full of men poisoned with arsenic. Our hospital has been built, medicines bought, physicians

and nurses paid, and accommodations for thirty beds provided, inside of two years, by a small monthly assessment on each miner and laborer employed by the company, and all are satisfied; none more so than the smelter hands, who can and do get a "bottle of that iron," and keep at work.

The preparation which I have used, and to the good effects of which I can testify, is Wyeth's, of Philadelphia. A. M. BULLARD, M.D.

Wickes, M. T.

Vaccination and Revaccination.

ED MED. AND SURG. REPORTER:—

On July 12th, 1881, I vaccinated Mrs. Sarah A. W., and her two children, William and James H., with Chambersburg virus. The vaccinations of all of them took, apparently, satisfactorily. The three had also been vaccinated in their infancy, the marks of which were still observable. William contracted smallpox in its hemorrhagic form, which terminated fatally, August 12th, 1881. Shortly after the death of William the mother and her servant girl took varioloid. James H. escaped. On April 6th, 1882, Sarah A. W. was taken sick, followed by an eruption simulating that of varioloid, but owing to the fact of her having had varioloid previously, I was uncertain as to my diagnosis; but the prodromic symptoms, together with the eruption, undoubtedly pointed to a case of varioloid.

This brings us to the question as to whether one successful vaccination is a preventive of smallpox, or of its modified form? I believe, in the majority of cases, it is. It is a well known fact, however, that an attack of smallpox itself does not protect, in exceptional cases. the same person from a second attack. A patient has come under my observation who had suffered with confluent smallpox at two different times; the interval between the two attacks was thirty years. One case has also come under my observation, in which vaccination took perfectly well, notwithstanding that several years previously she suffered with varioloid. Now, if neither an attack of smallpox, nor of its modified form, varioloid, in some persons, is a preventive against a second attack of smallpox, or of its modified form, how much less, then, can one successful vaccination be a preventive of the disease? I believe, therefore, that the only safe plan of vaccination as a preventive of smallpox, is by repeating the vaccination with pure vaccine several successive times, at intervals of a month, until there is no longer any more predisposition in the persons so vaccinated to either vaccinia or smallpox. Had William and his mother been vaccinated each a second time, smallpox in the former and varioloid in the latter, I have no doubt, would have been prevented, the same as it was in the case of James H. JOHN M. BATTEN, M.D.

Pittsburgh, Pa.

Does Vaccination Protect.

ED. MED. AND SURG. REPORTER:—

Dr. Beggs, in the REPORTER, for May 6th, asks some pertinent questions in regard to vaccination. From my observation I could answer some or all of them, not so satisfactorily, perhaps, as by some facts from personal experience. My father's older brothers were inoculated with smallpox matter, according to the fashion of their time, and had the disease in a modified form. My father, being younger, was vaccinated, as he came within the time of that discovery, in his sixth or seventh year. When about fifty, one of the neighbors was sick, and father was with him much of the time. It was pronounced a case of varioloid, and a child in the family had the disease severely. Father saw numerous cases after that. His health was as good as any of his family during life. He never had any symptoms of variola. When seven or eight years old, I took some vaccine matter from a good looking pustule on a school girl's arm, and scratched it into my wrist. It "took," and worked characteristically. I have generally had good health since, and never a sign of skin disease. I have never been revaccinated. I have been in the practice of medicine for twenty years, and but few of them have passed that I have not had cases of smallpox to treat. Have seen it in its worst forms, and never had a symptom of the disease. My vaccination has protected me for forty years. Not long ago I took my little daughter into the buggy, to answer a call a little way out of town. We drove up to the fence, and getting out, walked up to the house and went in. It was close and dark, and when I could see my patient, I found him in the stage of pustulation of smallpox. The little girl had taken hold of the man's hand. I did feel some trepidation; she is four years old. and had been vaccinated a year ago, with bovine virus matter. The time has passed for any signs of the disease. I expect she will be safe from its contagion all the rest of her life, if bovine vaccination is as good as humanized lymph, and she follows the example of her father and grandfather. Will some one else give their personal experience.

P. J. FARNSWORTH, M.D.

Clinton, Iowa, May 12th, 1882.

NEWS AND MISCELLANY.

Fourth Annual Congress of the American Laryngological Association.

Held in the Hall of the Medical Library Association, at Boston, on June 12th, 13th, 14th.

The President, Dr. F. I. Knight, of Boston, in the chair. Twenty-eight members present.

The first day's session was opened by an address of welcome, by Dr. S. W. Langmaid, of Boston.

The President then delivered his annual address, in which he called attention to the importance of laryngology, and the fact that this branch of medicine had received more attention within the past year, in all the medical schools of the country, and dwelt upon the great advantage derived by the general practitioner from the use of the laryngoscope. He entered more fully into the question of medical education, and especially the advantages derived by

the student from practical, clinical teaching of those branches in which personal observation is necessary. He then presented a plan for the practical teaching of laryngology, and said that the head of the department should give daily instructions for at least six weeks, in a room which could be darkened, and at the same time large enough to accommodate twelve students and as many patients, without crowding. It was his experience that these courses were given in rooms too small for the purpose, and consequently, the air in them became so vitiated that work could not be carried on with comfort in them. He concluded his address with the advice to the Association to raise the requirements of membership in the Association.

Dr. Elsberg then read an interesting paper on "Paralysis of the Vocal Cords," in which he gave a very clear and comprehensive classification of the different forms of paralysis, and also advocated a new nomenclature for the muscles of the larynx. He stated that unilateral paralysis was more common than bilateral, and that certain muscles were more prone to be affected than others. He also showed that spasm of the glottis might be present in such cases, and even alternate with the paralysis, sometimes necessitating tracheotomy.

Dr. Bosworth, of New York, said that he could see no advantage in the new nomenclature of the muscles of the larynx, and that in his opinion the classification prepared by Dr. Mackenzie, of London, into adductors and abductors of the cords, was so simple and comprehensive that he would prefer it to all other classifications. He also entered into the causes of the paralysis, and stated that they were either due to neuropathic or myopathic changes, and the latter were always caused by inflammatory infiltration in the muscular tissue.

Dr. Seiler concurred with Dr. Bosworth in preferring the old nomenclature, and objected to the function ascribed by Dr. Elsberg to the thyro-arytenoid muscle, viz.: that this muscle was a straightener of the vocal cords, and said that, owing to the peculiar insertion of the fibres of this muscle into the cords the latter must be drawn away from each other, and must be relaxed by the contraction of this muscle, thus making the edges of the cord concave.

Dr. Roe, of Rochester, reported a case of abductors of the cords, in which later brain lesions showed themselves.

Dr. Hartman, of Baltimore, reported a similar case, also due to central nervous disturbance.

Dr. Morgan, of Washington, said that double voice sometimes is produced by paralysis of the vocal bands; one of the sounds being produced by the membranous portion of the glottis, while the other is produced by the cartilaginous portion.

In closing the discussion, Dr. Elsberg said that he did not insist upon the adoption of his new nomenclature, but that he had found it more convenient than the old one. His reason for calling the thyro-arytenoid muscle a straightener of the vocal cords was, that when that muscle was paralyzed the cords were curved.

A paper sent by Dr. Glasgow, of St. Louis, on Laryngeal Asthma, was then read by Dr. Seiler. In this paper the author reported a number of cases in which asthma had co existed with laryngeal inflammation, and had been cured or greatly relieved by local treatment of the laryngeal mucous membrane. He came to the conclusion that in every case of asthma the larynx should be examined, and that if inflammation was found there it should be treated, for there were many cases of this affection which depended solely upon laryngeal irritation.

Dr. Jarvis, in discussion, reported two cases of hyperæmia of the cords complicated with asthma, which were relieved by local treatment.

Dr. Seiler said that he could readily understand how laryngeal irritation might produce asthma, when other peripheral irritations would produce a like result. He called attention to the fact that chronic inflammation of the larynx however, was, in many cases, due to nasal stenosis, and that the same cause, the mouth breathing, which produced the laryngeal irritation, might also directly cause the asthma.

Dr. Robinson, of N. Y., said it was an old fact that nasal obstruction was a cause of asthma, also that laryngeal irritation produced a like effect, but it was a difficult task to always locate the irritation in the larynx. Asthma was always due to organic lesion in the bronchial tubes, and he, therefore, was opposed to calling these cases laryngeal asthma.

Dr. Roe said that asthma might be due to irritation anywhere in the respiratory tract.

Dr. French, of Brooklyn, then exhibited some photographs of the laryngeal image taken by means of the laryngeal mirror in the living subject.

Dr. Morgan said he had made several ineffectual attempts to photograph the laryngeal image, but had not succeeded to his satisfaction. But that he had seen, several years ago, some made by Mr. Sleins, of Germany, which were tolerably good.

Dr. Elsberg said the difficulty was, that on account of the different planes in which the parts of the larynx were situated, all could not be brought into focus.

Dr. Seiler said that ten years ago he had tried to photograph the laryngeal image, but had failed, for the reason pointed out by Dr. Elsberg, and said that even if a good photograph could be obtained in a person accustomed to the mirror, it was impossible to photograph the larynx of a patient so as to obtain the pathological changes of the image, and this was the only utility of the process, in his opinion.

The session then adjourned to the afternoon.

AFTERNOON SESSION.

The first paper read was by Dr. Delavan, of New York, on

The Question of Hypertrophy of the Osseous Structure of the Turbinated Bodies, Practically Considered.

He said the design of this paper will be the establishing and the practical consideration of the following proposition, viz.: *The turbinated bones may, under proper conditions, undergo marked hypertrophy.* The opinion generally accepted upon this important question seems well set forth in the following paragraph, quoted

from a recent standard work upon "nasal catarrh." *

The author says: "The term hypertrophy of the turbinated bones is a faulty one, for the reason that real hypertrophy of these bones very rarely exists. Sometimes, indeed, it is true that one or more of them have become softer, more spongy, and more voluminous than they are in a perfectly healthy nose, but these are infrequent cases, and the very general rule is scarcely less true, *i. e.*, that hypertrophy is confined to the mucous membrane and submucous layer which cover these structures."

That this view is erroneous must be admitted, when due consideration is given, 1st, to the theoretical reasons which weigh against it, and, 2d, to the strong array of clinical evidence to which it is opposed.

1st. Theoretically, the process of hypertrophy in general may occur in almost any tissue of the body. Hypernutrition is, of course, the occasion of hypertrophy in bone as well as in other tissues, and to such structural changes the bones of the skull are particularly liable. To quote the familiar words of Sir James Paget: "Hypertrophy of bone presents itself in many interesting cases. It is usually a secondary process, ensuing in consequence of a change in a part with which some bone is intimately connected. Just as in their natural development and growth the bones of the skull are formed in adaptation to the brain, and those of the limbs are framed to a fitness of the action of the muscles, so in disease they submit in their nutrition to adapt themselves to the more active parts." †

The turbinated bones are not formed until a late period in the development of the fœtus. Indeed, "the inferior turbinated bone is ossified from a single centre which only appears at birth." ‡

This tardy appearance would imply considerable activity of development later in the history of the child, and it is not impossible to believe that in some cases there should occur an actual overgrowth. Again, although the condition of hypertrophy is antithetical with that of atrophy, there is no part which, being susceptible of one, is not also susceptible of the other. Atrophy of the turbinated bones, in the affection known as atrophic catarrh, is commonly met with and universally conceded to exist. Therefore, under conditions of nutrition opposite to those which characterize this disease, there should result the opposite condition of growth, namely, hypertrophy.

The probability of this result is greatly increased when we recall the peculiarly intimate relation which exists between the mucous membrane of the turbinated body and the bone, through the medium of the membrana mucosa, which not only forms a fibrous network for the support of the blood vessels, etc., but actually passes into the periosteum, the characteristics of which it more nearly resembles. Any increase of the blood-supply to the turbinated mucous membrane would be communicated, without doubt, to this periosteum in far more than the ordinary measure, and the nutrition of the bone proportionately increased. The conditions favorable to hypertrophy of the turbinated bone would seem to be—

1. Unusual space in the nasal fossæ.
2. Long continued hyperæmia of the structures investing the bone.
3. The existence of the above conditions during the period of greatest constructive activity.

It is an established fact that the too free inspiration of air through the nares will produce turgescence of the nasal mucous membrane, and where long continued, chronic hyperæmia. Persons, therefore, whose nasal cavities are unusually wide, are commonly the subjects of catarrh. In the normal nasal chamber the erection of the turbinated corpora cavernosa is limited by the boundaries of the nasal cavity. The greater the possibilities for expansion, and the more the exposure leading to congestion, the less likely are the soft parts to return to their normal conditions of size and nutrition. And, of course, the greater the hyperæmia of the soft parts, the greater the hypernutrition of the bone. With the above conditions occurring early in the history of the patient the hypertrophic process would go on, not suddenly and rapidly, but slowly, and in the course of the regular growth of the individual, not attaining its maximum until the adult period.

In the vast majority of instances the conditions which would furnish these factors would be congenital, and they would be found:—

1. In cleft palate.
2. In deviation of the nasal septum.

This first condition, however, is comparatively rare, and need only engage our attention by way of illustration.

Congenital *deviation* of the *septum*, on the other hand, is of frequent occurrence, and it is in this condition, theoretically speaking, that the largest proportion of cases of turbinated hypertrophy would appear. Of course, deflection may be produced at any time of life in a previous healthy septum; for example, by fracture or dislocation of its bone or cartilage, by pressure from an intra-nasal growth, etc. These instances, however, are unusual, and form the exception to the rule.

Reasoning by exclusion, therefore, the congenital origin of a large proportion of cases of deflection of the septum seems evident.

As will appear later, the middle turbinated bone is the one most frequently enlarged, and, since the septum is in a plastic condition until some time after birth, the question naturally arises, is the turbinated hypertrophy due to the deflection, or is the deflection due to the hypertrophy? If the turbinated bone was enlarged at an early date, why would it not, by crowding against the septum, force it beyond the median line, and thus become, not the result of the deflection, but actually its cause. This seems improbable, for two reasons: first, because nature is rarely asymmetrical, so that enlargement of one turbinated bone would probably be met by a corresponding enlargement of its fellow; and second, because the hypertrophied bone is almost invariably found opposite the point of

* "Nasal Catarrh," Beverly Robinson, p. 88, 1880.

† "Lectures on Surgical Pathology," Sir James Paget. Lindsay and Blakiston, 1865, p. 73.

‡ "Sharpey and Quain," vol. i, p. 72.

greatest concavity of the septum, in which position the opportunities for expansion are present in the most marked degree.

2. Turning now from theoretical considerations to the practical demonstrations of the main proposition, we desire to offer some anatomical and clinical evidence based upon direct observation.

About two years ago, while dissecting the nasal fossæ in a specimen which chanced to come into the Pathological Laboratory of the New York Hospital, the writer observed three points:—

1. There was well-marked deflection of the septum.

2. The side toward the concavity of the septum was completely occluded by the middle turbinated body.

3. Upon removing the soft parts from the middle turbinated bone, the bone itself was found to be in a condition of unquestionable hypertrophy.

The importance of this condition at once suggested itself, and its further investigation was immediately begun. To this end the museums of Washington, Philadelphia and New York were visited, and careful search for illustrative specimens made in the following craniological collections:—

	Crania.
Smithsonian Collection, Army Med. Museum, Washington, containing	4000
Academy of Natural Sciences, Phila.	2000
Wistar and Horner Collection, "	260
Wood Museum, Bellevue, New York	100
Hyrtl's Collection, College of Physicians, Philadelphia	140
	6500

In all these collections but the last, the crania were derived from every variety of source, and were in all stages of degeneration, so that the bony appendages of the nasal cavities were in most instances destroyed and the specimens unfit for our purposes. Far different was it, however, in the case of the splendid and unique cabinet of Professor Hyrtl, purchased by the Mütter fund for the College of Physicians, Philadelphia, and intended to exhibit a typical representation of every nationality in Europe. The specimens were derived indiscriminately from persons of at least average good health, and with no reference whatever, of course, to existence of any nasal deformity. In nearly every instance in which hypertrophy was observed, it was confined to the middle turbinated bone of the wider nares, which singular predilection can only be explained on the ground that, as this turbinated body occupies the position directed toward the greatest concavity of the deflected septum, its opportunities for expansion during life are greater than those of its fellows. In the case of a very few specimens the middle turbinated bones were broken.

The hypertrophy was, as a rule, symmetrical, extending throughout the whole antero-posterior course of the bone in about the same relative degree. It had about it nothing whatever of the nature of an exostosis, but the bony plates were of the same relative thickness as in the normal organ, the whole resembling a natural turbinated bone magnified in size. In some instances, however, they were notably thinner than normal, and the condition of general, symmetrical hypertrophy was by no means constant, the enlargement seeming rather to follow the course of the deflected septum.

An examination of the collection developed the following extraordinary statistics:—

Of the whole number of specimens 140
There was deflection of septum in 18 = 12⅞ p. c.
Of these 18 there was
Hypertrophy of the middle t. b. in 11 = 7⅞ p. c.
Absence or atrophy of " " 7 = 5 p. c.
Or,
Of the whole number of cases of deflection of septum 18
There was hypertrophy of the m. t. b. in 11 = 60 p. c.
There was absence of, or atrophy of, the m. t. b. in 7 = 40 p. c.

It will thus be seen that in the above collection more than one-half of all cases of deflection of the septum showed hypertrophy of the middle turbinated bone. The actual percentage of cases of hypertrophy is probably much greater than 60 per cent., as in the several specimens in which the turbinated bones were missing, the middle turbinated bones were, without doubt, as judging from the perfect specimens, larger than normal. During the course of the above examination *ex ostosis of the septum* was not found in a single instance. In a number of cases the writer has demonstrated the presence of this bony hypertrophy in the living subject, by sounding, as it were, the enlarged mass with a fine needle, and observing the depth at which its point was arrested. Instead of entering the mass for some distance, as would be expected, it will frequently impinge upon bone at a point comparatively near the surface.

The figures above given will surprise those who believe that stenosis in deflection of the septum is caused by hypertrophy of the soft tissues alone, and that absolute relief will follow the removal or destruction of the redundant mucous membrane. Indeed, in several specimens examined, the middle turbinated bone had approached so nearly to the septum that it was scarcely possible to sweep a probe between them, and the occlusion was almost as complete as it could have been during the presence of the soft parts. No attempt at relieving the resulting occlusion simply by the removal of the mucous membrane could have succeeded. In such a condition the free inspiration of air must have been greatly reduced, while the olfactory region was shut off most completely, and all perception of odors thereby lost. The results of nasal stenosis, and the necessity for its relief, have been ably described by many excellent writers, and need not here detain us. Heretofore operative efforts have been directed solely to the relief of the occlusion of the narrower nostril. For this three general methods have been proposed—

1. Removal of the mucous covering of the convexity of the septum.

2. Removal of the mucous covering of the

convexity of the septum, together with the underlying bone.

3. Boring bodily through the nostril by means of the dental engine.

In all these operations the condition of the enlarged turbinated bone of the opposite side has been unrecognized. Any operation for rectification of the deflection of the septum would, in such a case, only result in making the occlusion of the wider nostril more complete than before, and since the nostril toward the convexity of the septum is often more pervious than the other the operation would fail of its object. Removal of the turbinated bone itself, entire or in part, is therefore essential. As to the propriety of the operation, there is no reason, anatomically or surgically speaking, why it should not be performed. In a recent article,* by so eminent an authority as Morell Mackenzie, it is warmly recommended, and he refers, for his support, to Valsalva, Fergusson, and Pirogoff, adding: "I have myself frequently removed portions of the turbinated bones without seeing any evil result follow, and it appears to me extremely doubtful whether any bad effect could result from the removal of a portion of one of them."

From what has been proven with regard to the anatomical conditions in deviation of the septum complicated with hypertrophy of the middle turbinated bone, we feel justified in asserting that the rational and scientific plan of operation for its removal would be as follows:—

1. Removal of the obstructing middle turbinated bone of the wider nostril, allowing at the same time, if possible, a remnant of the organ to remain, sufficient for the performance of its normal physiological function.

2. Straightening the deflected septum.

By this means will be obtained, we believe, all of the ends most desirable for the relief of this most uncomfortable and injurious condition.

CONCLUSIONS.

1. Hypertrophy of the turbinated bones is of frequent occurrence, especially in connection with deviation of the nasal septum.

2. Nasal and catarrhal conditions, stenosis, resulting from such hypertrophy, can be permanently relieved only by removal of the bone itself.

3. Removal of the bone is a justifiable operation.

4. In the existence of such hypertrophy no operation for the restoration of a deviated septum should be resorted to until after the removal of the opposing turbinated bone.

In the discussion following Dr. Seiler said he had seen several cases of hypertrophy of the turbinated bones, and that they all had been bladder-like expansions of the bony tissue, into which the drill of the dental engine entered very easily.

Drs. Ash and Bosworth, of New York, agreed with the writer, the latter stating that he had seen a number of cases, but had found that the tissue overlying the bone had also been hypertrophied. Dr. Ingals said that he was of the opinion that hypertrophy of the turbinated bone caused deflection of the septum, and not, as the writer had stated, that the reverse was the case.

Dr. Bosworth said all his cases had been on the right side.

Dr. Jarvis said that hypertrophy of the turbinated bones was very rare. Also, that the presence of hypertrophied turbinated tissue would produce thickening of the septum, which might be confounded with deviation of the septum.

Dr. Seiler said he was in the habit of measuring the thickness of the septum by means of a pair of callipers, and thus was at once enabled to make a differential diagnosis between localized thickening and true deviation.

Dr. Deblais, of Boston, said he had found deviation of the septum to be usually to the left in right-handed persons, and vica versa, and thought that the deformity was due to the use of the handkerchief.

In conclusion, Dr. Delavan said he had intended to convey the impression that the hypertrophy of the turbinated bones consisted in a bladder-like expansion of portions of the bone. He also said it was not certain at what time of embryonic life the septum is formed, but that it was certain that it was soft some time after birth. The most important part is the treatment, and in all cases the operation for deviation of the septum is necessary.

Dr. Bosworth then opened the discussion on ozæna, its pathology and treatment, and stated that ozæna was always due to atrophic changes in the nasal mucous membrane, and that the treatment should be mildly stimulant. There were but few cases of cured ozæna, but many cases could be made comfortable and the odor held in abeyance by cleanliness.

Dr. Robinson, in discussion, said that many cases of the disease were caused by catarrh following the eruptive fevers, such as measles, scarlet fever, etc. The fetid odor does not entirely disappear after thorough cleansing, and he believed that perverted secretion was the cause of the odor.

Dr. Johnston, of Baltimore, said he had seen a case of perverted secretion giving rise to fetid odor and due to disease of the parietal sinuses.

Dr. Roe said he had found thorough cleansing of the nasal cavities and insufflation of boracic acid to be the most successful mode of treatment.

Dr. Johnston thought that nasal catarrh and ozæna were different diseases.

Dr. Jarvis then read a report of a case of disease of the antrum simulating ozæna.

I think the subject of antral catarrh, as a secondary manifestation to chronic nasal catarrh, merits careful consideration. It would have probably received more attention if it had occurred as frequently as complications of the antrum in atrophic ozæna, and as catarrh of the antrum due to deep-seated tooth fillings and the presence of foreign substances in this cavity. An interesting case of this kind came under my observation last month. The patient, a lady, had been racked with almost continuous pain, extending over three weeks in duration. She had suffered with hypertrophic nasal catarrh for many years. The pain was unilateral, being largely limited to the right side of the face;

* Nasal Polypi, etc., *Archives*, Vol. III, No. 2.

it coursed through the cheek, and by reason of the involvement of the anterior and posterior dental nerves, there was much odontalgia. The patient, almost crazed at times by intense suffering, had become dependent upon powerful narcotics to obtain relief. By gradual increase the doses of these drugs have become alarmingly large. Hearing was imperfect on the right side, and there was much conjunctival congestion. In spite of the expostulations of her dentist, she had one of the right upper bicuspids, removed.

The patient consulted the New York ophthalmologist, Dr. Mullendorf, who referred her to me, for a tumor of the nostril.

A large, inferior turbinated hypertrophy completely occluded the right nostril. I pierced it with my transfixion needle, and removed it with the ecraseur. A stream of fetid pus poured from the nostril on the withdrawal of the excised tissue.

With the assistance of Dr. Henry, I carefully treated the antrum, obtaining immediate relief, and in three weeks a permanent cure.

I believe the antral disease was, in this instance, brought about by the pressure of the hypertrophied tissues disorganizing the valve of the antrum, thus permiting the acrid catarrhal discharges to enter this cavity, but preventing their exit.

Dr. Langmaid said he had seen cases in which other secretions also had been perverted, and had given rise to a fetid odor.

Dr. Rumbold, of St. Louis, showed a nasal douche, for the thorough cleansing of the nasal cavities in these cases.

Dr. Ingals thought insoluble powders should not be thrown into the nasal cavities, as they gave rise to irritation, and that solutions were better than powders.

Dr. Hartman made mention of Gottstein's method of treating ozæna with cotton tampons, and stated that he had found no advantage in this method over others.

Dr. Seiler concurred with Dr. Hartman.

Dr. Bosworth, in closing the discussion, reiterated his statement, that if the nasal cavities were thoroughly cleansed no odor would remain, but that in many cases it was difficult to reach all portions of the nasal cavities with the cleansing solution. The odor was due to decomposed animal matter retained in the nose. Rhinitis hypertrophica and rhinitis atrophica cover all cases of catarrh, and include ozæna. The proper treatment for the latter disease is stimulating applications to the mucous membrane, and that the cotton tampon acted as a stimulant, therefore it did good, but it had the objection of being inconvenient to the patient.

Second Day.

Tuesday's session opened with a business meeting, in which, among others, the report of the Committee on Nomenclature was conditionally accepted.

After the business meeting Dr. Ingalls read a paper on Deflection of Septum, in which he said that deflection of the septum narium may be of traumatic origin or spontaneous; the latter most common. The cartilage and bony septum are both bent in many cases, the latter being apparently the mechanical result of firm articulation with the cartilage, in which the flexion usually commences. The flexion in cases of spontaneous origin apparently results from hyperplasia of the cartilage, the growth taking place mainly at the edges, as a result of which growth the cartilage is enlarged, and because of its position (being set as it were in an unyielding frame) the cartilage is forced to bend.

Causes traumatic or spontaneous; the latter can result from hyperæmia of the parts—chronic catarrh. Patients apply for relief because of obstructed respiration or bending of the nose. Usually find also excessive secretion from nasal mucous membrane and alteration of voice. As a rule, crooked noses are caused by flexion of the septum, which pushes the point of the nose toward the side of the concavity. For convenience of description they are divided into four classes:—

1st. Those in which there is simple bending of septum with a uniform concavity on one side and a corresponding convexity on the other.

2d. Those caused by direct injury, in which there is more or less bending of septum, with depression of nose, depending for the extent of the deformity on severity of injury, etc.

3d. Those in which flexion occurs only in cartilage, near nostril. This flexion may be so great as to occlude nostril by a nearly horizontal plate of the bent cartilage. These cases usually associated with considerable deformity of nose, due to crowding of its point to one side.

4th. Those in which flexion causes a longitudinal ridge running along the course of the articulation of vomer and cartilage.

In cases of spontaneous origin the process continues for an uncertain time, though probably in most cases at least two years.

Several operations have been recommended, the most prominent of which are those of Chassaignac, William Adams, and Goodwillie, but these have been more or less modified to suit individual cases.

In the first class of cases often no operation is needed, though Adam's operation would probably correct the deformity.

In the second class Adam's operation, or Steel's modification of it, is most suitable.

In the third and fourth classes no operation seems likely to be permanently successful which does not include removal of the redundant tissue.

Simple perforation is not to be recommended, because it will not cure the catarrh or remedy the deformity; besides, it favors the formation of scabs, etc.

For these cases the operation preferred consists of separating the mucous membrane, removing the redundant tissue, replacing the membrane, and then holding the septum in position until firm union has taken place. Anæsthetic to be used. Posterior nares of the closed side to be plugged before operation is begun. Just enough of septum to be removed, so that when returned to its normal position, the cut edges will be in apposition. The cartilage must be kept in position for some time by plugs in nostril. The result will be correction of deformity of nose, removal of nasal obstruction and its accompanying symptoms,

obstructed respiration, catarrh, and change of voice.

Then Dr. Jarvis read a paper on "A New Operation for the Deviation of the Nasal Septum," in which he advocated the removal of the projecting portions of the septum, by means of his wire snare, and claimed as the advantages of this over other operations, the bloodlessness and exemption from pain.

And Dr. Shurley read a report of two cases of lupoid ulceration of the septum, pointing out the difficulty of making a differential diagnosis between the ulcerations of lupus and those of syphilis.

These three papers were discussed together, and the discussion was virtually a reiteration of the opinions expressed in the discussion on Dr. Delavan's paper in regard to the causation of deviation of the septum.

Dr. Shurley, however, in closing the discussion, called attention to the value of iodoform as a local application in lupoid and syphilitic ulcerations.

AFTERNOON SESSION.

The session was opened by the reading of a paper on "Impaired Cardiac Power as an Efficient Cause of Congestive Affections of the Throat," by Dr. Beverly Robinson, of New York, in which the author called attention to the frequent occurrence of congestion of the upper air passages, due to loss of power in the heart, muscles, and to venous congestion, and that the proper treatment of such cases was the exhibition of heart tonics, combined with local astringent applications to the larynx and pharynx.

Dr. Shurley said, in the discussion following the reading of the paper, that he had met with cases in which the congestion of the larynx had been due to impaired power of the heart, and had found that local applications alone were of no avail in the treatment, but that they had at once improved under chloride of iron, with tincture of digitalis. He then said the ultimate causes of disease of the throat were too often overlooked by specialists, and the local symptoms treated heroically, when some other more central organ was the cause, without giving relief to the patient.

Dr. Seiler fully endorsed Dr. Shurley's remarks, and related a case in illustration. A young girl, presenting herself for treatment of some throat affection, he found, on examination, a general relaxation of the mucous membrane, and asking a few pointed questions, arrived at the conclusion that uterine disease was the cause of her throat trouble. He then advised the patient to tell her family physician about her uterine symptoms, and place herself under treatment for them, as local treatment of the throat would be of no avail in her case. The patient answered by saying, "Doctor, if I had known that you could see all the way down, I would not have come to you."

Dr. Daly also endorsed Dr. Robinson's views, and called attention to the frequent occurrence of pharyngeal disease due to gastric irritation.

A paper by Dr. Harrison Allen, on Pharyngeal Irritation, was then read by the secretary, which was chiefly a dissertation on the anatomical structure of the pharynx and soft palate. Dr. Allen advanced the theory that swelling of the pharyngeal tonsil and the presence of nasal polypi caused spasmodic contraction of the muscles of the soft palate, thus making rhinoscopic examination difficult, if not impossible.

Dr. Bosworth said that in his experience the presence of polypi in the nares did not interfere with rhinoscopic examination.

Dr. Ingals said he was in the habit of making the rhinoscopic examination first, as he had found that after irritation of the pharynx had been produced by the laryngeal mirror it was much more difficult to obtain a view of the parts.

Dr. Daly said that telling the patient to breathe through his nose while the mirror is in situ, caused the soft palate to drop and facilitated rhinoscopy.

Dr. Knight then exhibited a case of "Aphonia Spastica," or laryngeal stammering, which was examined by the members present. After the patient had retired he said that the disease was a rare one, and that he had not seen a case until after the paper of Schnitzler had been published. It was progressive, and considered incurable, and was produced by a spasm of the tensor muscles of the vocal cords and of the respiratory muscles. He was treating the patient by galvanism and gave him nerve tonics.

Dr. Longmaid said he had a similar case under observation, in which, lately, symptoms of degeneration of the spinal cord had appeared.

Dr. Elsberg said he would advise vocal gymnastics in addition to the galvanism and nerve tonics, and thought the prognosis was not hopeless in those cases which did not depend upon central nerve lesions.

Dr. Daly then read a paper on Catarrh Involving the Antrum, and its treatment, which was a report of two cases of antral disease with extremely fetid discharge which were cured by removing a tooth, opening the antrum and treating its lining mucous membrane with astringent injections.

Dr. Shurley said he had seen two cases of antral disease, but without offensive discha ge, and had treated them by opening the antrum and by injecting a strong solution of chlorate potassium.

Dr. Seiler then opened the discussion on Laryngeal Ulcers, and said that there were several kinds of ulcerations of the mucous membrane of the larynx. First, abrasions, which amounted to mere lacerated loss of epithelium, and were not covered by pus, occurring mostly in those parts which were subjected to friction, such as the edge of the epiglottis and the interarytenoid space. Second, shallow ulcerations, involving the whole depth of the mucous membrane, and covered with creamy secretion, resembling pus. The so-called catarrhal ulcerations, also chiefly found in the parts most exposed to friction, and third, the deep destructive ulcerations, which affect and destroy the tissues below the mucous membrane. The latter are always due to some specific poison in the system, such as syphilis, or tuberculosis, and are invariably the result of the breaking down of gummata in syphilis, and cheesy deposits in phthisis. The syphilitic ulcerations had the peculiarity of being symmetrical on both sides, and that the shallow catarrhal ulcer

was also observed in this disease, as well as in ordinary catarrhal inflammation.

Dr. Bosworth said he did not believe in the so-called catarrhal ulcer without a specific cause, and that the shallow ulcer of syphilis was due to ulceration of mucous patches. If there was no catarrhal ulcer then no ulcer existed in the larynx that was not due to specific cause.

Dr. Jarvis said that he also did not believe in the existence of a catarrhal ulceration, but that he had met with ulcerations of the mucous membrane, not due to either phthisis, or syphilis, or cancer—especially in the mouth.

Dr. Robinson said he had seen in catarrhal laryngitis, lenticular abrasions in the laryngeal mucous membrane, which might be called catarrhal ulcers, which resembled closely the abrasions seen in herpetic pharyngitis, and that probably the so-called catarrhal ulcer was nothing but a herpetic sore.

Third Day's Session.

The session was opened by the reading of a paper by Dr. Wagner, on "A Case of Expulsion of the Ossified Arytenoid Cartilage following Thyrotomy." The author not being present, the paper was read by the Secretary. In the paper, the author related the history of a case of papilloma of the larynx, which for its removal necessitated the operation of thyrotomy. The thyroid cartilage was found to be ossified, and had to be cut with a saw. Three weeks after the operation the patient was discharged as cured, but returned to the hospital three weeks later bringing with him a piece of bone which had been expelled during a fit of coughing. This, on examination, proved to be the ossified left arytenoid cartilage.

Dr. Seiler said that he had seen two cases of loss of arytenoid cartilage, in one of which the cartilage had been expelled during a fit of coughing. In both cases the perichondritis had been due to syphilis.

Dr. Longmaid then opened the discussion on the "Physiology, Pathology and Treatment of the Singing Voice." He said the subject was too extended to be discussed within the limited time at the disposal of the Association, but that he had a few points he would bring before the meeting. First, the effect of slight catarrhal inflammation of the cords upon the voice. He had observed that under such conditions the voice of singers was passable up to a certain point, but that beyond this the voice gave out entirely. The removal of the inflammation restored the voice. Second, the influence of the nasal cavity upon the voice; and thirdly, does excision of the tonsils injure the voice or not. He thought that excision of hypertrophied tonsils did not injure the voice, but improved it. He then showed a case of hypertrophied adenoid tissue of the vault of the pharynx, in which the quality of the voice was much altered.

Dr. Jarvis said that the alteration of the voice caused by nasal disease was very readily demonstrated, and that frequently chronic inflammation of the vocal cords was due to nasal catarrh.

Dr. Seiler said that, in a paper read at the last meeting of the Association, he had proved that the nasal cavities exerted a very great influence upon the voice, and stenosis, or even narrowing of the nostrils, would produce an alteration of the voice.

Dr. Roe said he concurred with Dr. Jarvis and Dr. Seiler, that the nasal cavities greatly affected the voice, and called attention to the evil results of overstraining of the voice, after a prolonged rest, in singers.

Dr. Ingals deplored the want of unanimity of opinion in regard to the effect of nasal disease upon the voice, and said he was of the opinion that unless the voice was greatly altered, an operation within the nose was uncalled for.

Dr. Jarvis took exception to this statement, and said that if there existed any encroachment upon the normal calibre of the nasal cavities, it should be removed. If it did not alter the voice then, it would certainly do so in the near future.

Dr. Deblais related a case of a male soprano, who, through nasal disease, was prevented from singing in public, and after the cure of his catarrh was again able to sing.

All the members were unanimous in the opinion that tonsillotomy does not interfere with the voice.

Dr. Morgan said that the concerted singing of children in public schools was very injurious to the voice, and that, in his experience, many cases of chronic throat disease had their origin in this pernicious practice.

Dr. Roe then opened the discussion on the utility of topical applications in chronic laryngitis, calling attention to the indiscriminate use of the brush or probang by the general practitioners, in the treatment of throat diseases.

In the discussion which followed the members were unanimous in the opinion that local and general treatment should be combined. The meeting then went into executive session, and elected the following officers for the ensuing year: President, Dr. G. M. Lefferts, New York; First Vice President, Dr. Carl Seiler, Philadelphia; Second Vice President, Dr. F. Ingals, Chicago; Secretary and Treasurer, Dr. D. B. Delavan, New York; and decided to meet next year in New York City.

Medical Banquet at Little Rock.

On Tuesday, June 1st, the physicians of Little Rock tendered a complimentary banquet to the Arkansas State Medical Society, in session at Little Rock. The bill-of-fare was handsomely printed on an amputating saw, made of cardboard. The following toasts were proposed and responded to:—

1. "The State Medical Society of Arkansas"—A. N. Carrigan, M.D.
2. "Our Retiring President"—R. G. Jennings, M.D.
3. "Our President Elect."
4. "Saddle Bags."—W. H. Hawkins, M.D.
5. "The Music in Medicine"—T. E. Murrell, M.D.
6. "Our Medical Colleges"—Wm. Thompson, M.D.
7. "Our Bachelor Brethren"—J. H. Lenow, M.D.
8. "Ye Jolly Doctor"—J. M. Keller, M.D.

Card from Prof. John J. Reese.

To the Editor of the Medical and Surgical Reporter:—

DEAR SIR: I beg to avail myself of your courtesy, to correct an error in connection with the report in last week's daily papers of an autopsy made by myself and Dr. Cadwalader, acting Coroner's Physician, of a woman supposed to have been drowned in the river Delaware.

The reporters of the case, in their desire to make it as graphic as possible, have put *their own* interpretation upon the results of this autopsy, while making it appear to the reader that they are expressing *my* views; and inasmuch as these inferences do not seem to me to be fully warranted from a single isolated case, especially where there was no absolute proof that the death was *caused* by drowning, I do not wish to be considered as endorsing the rather premature conclusions attributed to me by those well meaning but over zealous reporters.

Certainly, the leading authorities all teach that the presence of water in the lungs and stomach (especially the former) constitutes the most reliable evidence of death from drowning. And the entire absence of water from both the lungs and stomach, in the autopsy referred to, was undoubtedly a very noticeable feature, *provided* we were certain that drowning was the real cause of death, which we were not, as the case was one of a multitude of similar ones on which the Coroner's jury pronounces the usual stereotyped verdict of "found drowned."

It is evidently a very important point for the legal physician to settle: What are the positive, unequivocal signs of death by drowning? It may, in truth, become the *vital* point to establish in a capital case, as would appear to be the fact in the now pending Malley case. But in order to establish an important scientific truth, the experiments should be repeated, under varied circumstances, until every doubt is removed.

I may be permitted to say, in this connection, that I am now engaged in investigating the post-mortem appearances in cases of death from drowning, as a legitimate object of inquiry connected with medical jurisprudence; but I had not the remotest idea that the results of the late autopsy, which was conducted with the strictest privacy, and which was only part of a series of observations of a similar nature, would have fallen under the ken of the ubiquitous "reporter," and been made to assume a coloring not designed by myself.

JOHN J. REESE, M.D.

316 *South Twenty-first St., June 26th*, 1882.

The Berlin Hygienic Exhibition.

Careful investigation of the ruined Hygienic Exhibition has resulted in the unfortunate conclusion that nearly a year must elapse before the buildings and collections can be sufficiently restored to open the exhibition. It would seem that the preparations to meet emergencies, particularly the supply of water in case of fire, were totally inadequate, and also that, to save money, the directors had purchased the well-dried materials from the committee of least year's Industrial Exhibition in Halle.

Items.

—Drs. Fordyce Barker, Austin Flint and John G. Adams, have been appointed delegates from the New York Academy of Medicine to the International Congress of Hygiene, which meets in Geneva, Switzerland, from the 4th to the 9th of September.

—It is announced that the French Minister of Marine has placed at the disposition of M. Alphonse Milne-Edwards the vessel, Le Travailleur, for a dredging expedition in the Bay o Biscay, as far as the Canary Islands. The operations, which are to be made with a view to studying the fauna and flora in deep sea, will take place during July and August.

The Sweating Sickness of the 16th Century.

The Boston *Medical and Surgical Journal* contains an interesting account of this strange disease that visited England five times in the early part of the 16th century, and carried off over thirty thousand victims. The disease usually began with a little fever, possibly a slight pain in the head and heart; when suddenly a most profuse sweating would occur, by which such great prostration was produced that in many cases the victims died in two or three hours. It would seem that the disease was due to defective hygienic surroundings and to improper modes of life. Drugs had little or no influence over it. The disease was not always fatal, nor did one attack protect from a second. Cardinal Wolsey was four times attacked. The disease has now disappeared from England, but it was observed among the Turks during the Crimean war, in the hospitals at Scutari.

QUERIES AND REPLIES.

T. C., of Pa., is answered as follows: When the twins are male and female, the latter is called "Free Martin:" when full grown resembles a steer, and does not conceive; highly esteemed in England for beef cattle.

MARRIAGES.

CLOW—SARVER.—On Thursday, June 1st, 1882, at the residence of the bride's parents, 210 Locust street, Allegheny, Pa., by Rev. J. W. Witherspoon, assisted by Rev. J. Sarver, of Luchburg, Pa., Miss Maggie A. Sarver, daughter of William Sarver, M.D., and Mr. Will. E. Clow, of Chicago, Ill.

PECK—WILLIAMS.—At West Livingston, N. J., Wednesday evening, May 17, 1882, by the Rev. J. A. Ferguson, E. E. Peck, M.D., of Caldwell, N. J., and Nellie L'Hommedieu, only daughter of J. C. and Agnes J. Williams.

REYNOLDS—SMITH.—In this city, May 29, ult. at the residence of the bride, No. 1324 Hanover street, by Rev. Dr. M. T. Eva, A. Sidney Reynolds, M.D., and Miss Lizzie Smith, all of this city.

SEAMAN—TOWNSEND.—At St. Paul's Episcopal Church, Glen Cove, Long Island, June 8, 1882, by the Rev. Dr. John C. Middleton, Richard F. B. Seaman, M.D., and Sadie L., daughter of Mary Embrie and the late Frederic E. Townsend.

WENTZ—ULP.—On Thursday, June 1, 1882, at St. Barnabas P. E. Church, Haddington, West Philadelphia, by the Rev. John G. Bawn, Alexander C. Wentz, M.D., of Hanover, Pa., and Miss Clara B. Ulp, of West Philadelphia.